THE EFFECT OF MARKET ORIENTATION ON SERVICE INNOVATION
A STUDY ON THE INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) SECTOR IN JORDAN.

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COMMITTEE DECISION

This thesis (The Effect of Market Orientation on Service Innovation- A Study on the Information and Communication Technology (ICT) Sector in Jordan) was Successfully Defended and Approved on 26/4/2011.

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نموذج رقم (١٨)
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عنوان الرسالة: The Effect of Market Orientation on Service Innovation. A Study on the Information and Communication Technology (ICT) Sector in Jordan.

اعلن بأنني قد التزمت بقوانين الجامعة الأردنية وأنظمتها وتعليماتها وقراراتها السارية المفعول المتعلقة باعداد رسائل الماجستير عندما قمت شخصيا" باعداد رسالتي وذلك بما ينسجم مع الأمانة العلمية وكافة المعايير الأخلاقية المتعارف عليها في كتابة الرسائل العلمية. كما أنني أعلن بأن رسالتي هذه غير منقولة أو مستلة من رسائل أو كتب أو أبحاث أو أي منشورات علمية تم نشرها أو تخزينها في أي وسيلة اعلامية، وتأسيسا" على ما تقدم فانني أتحمل المسؤولية بأنواعها كافة فيما لو تبين غير ذلك بما فيه حق مجلس العمداء في الجامعة الأردنية بالغاء قرار منحي الدرجة العلمية التي حصلت عليها وسحب شهادة التخرج مني بعد صدورها دون أن يكون لي أي حق في التظلم أو الاعتراض أو الطعن بأي صورة كانت في القرار الصادر عن مجلس العمداء بهذا الصدد.

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تعتمد كلية الدراسات العليا
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Dedication

To my parents,

Thank you for your unconditional support,
Coordination, and motivation.
Thank you for giving me a chance to
Prove and improve my self through all my walks to life.
Thank you for giving me strength to
reach for the stars and chase my dreams.

I am honored to have you as my parents.

To my sisters,
Rania and Amal

To my brothers,
Salim and Amin

Thank you for believing in me.
Thank you for progressive support, assistance, and enthusiasm.
Especially Amin,
Who is always ready to submit all what he has to let me more relax,
and offers me a very nice and wonderful things.
Kindly keep in your mind that all that progressive support
is highly appreciated.

God bless them.

Please do not ever doubt my dedication and love for you.

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Last, but not least, I extend thanks and appreciation to everyone who helped directly and indirectly to get this work done.

This thesis is only a beginning of my journey.

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ICT	Information and Communication Technology

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ABSTRACT

The main purpose of this study is to investigate the effect of market orientation on service innovation in Jordanian Information and Communication Technology (ICT) Sector. Customer orientation, competitor orientation, inter-functional coordination, intelligence generation, intelligence dissemination, and intelligence responsiveness were the components of market orientation in this study.

The population of this study was defined as all Intaj members that are included within Information and Communication Technology (ICT) Sector in Jordan which are 184 companies till February 2011. Primary data were collected from 50 companies by disseminating 300 questionnaires to the key respondents who were the employees within marketing and sales departments in that fifty companies. Multiple regression analysis was used to fulfill the research objective.

The findings indicated that there is a high level of implementation of (1) market orientation and (2) service innovation within selected companies, and that there is a statistically significant effect of market orientation on service innovation, as well as all market orientation components have statistically significant positive effect on service innovation except for intelligence generation, and the most important (influential)

independent variable within market orientation construct to influence service innovation was competitor orientation.

According to the findings of this study, a number of recommendations were presented to enhance service innovation processes in ICT sector, Such as: (1) Jordanian ICT companies must be careful about the actions and activities of their current competitors without neglecting the threat of potential competitors, (2) Jordanian ICT companies should direct more of their capabilities toward benefiting their customers as much as possible, in addition to broaden the area of customer participation, (3) modifying the organizational structure of Jordanian ICT companies to facilitate inter-functional coordination activities, in addition to institute organized databases to perform this task smoothly, (4) to be careful about the quality of collected information and appreciate its value before intelligence dissemination, (5) as well as maximizing the importance of communication between all functional departments and then translate that culture into behaviors, (6) and then develop a deliberate response system on timely basis.

Chapter One:

Introduction

1.1. Background to the Study

Nowadays, the environment is dynamic, changeable, and essential, as soon as the competition is intensive. These circumstances and many others compel the organizations to adopt certain business concepts, policies, and practices in order to attain their goals and to get prominent results.

Among those business concepts is market orientation. Market orientation is a construct to generate new ideas and motivation in order to react to the environment and enhance innovativeness (Hurley and Hult, 1998). Kohli and Jaworski (1990) distinguished between marketing concept as a business philosophy, and market orientation as the actual implementation and application of the marketing concept. That was a starting point for market orientation (customer is the primary focus of market orientation).

The cultural perspective (Narver and Slater, 1990) and the behavioral perspective (Kohli and Jaworski, 1990) are the most widely discussed views in the field of market orientation.

Research directly designed to compare and contrast market orientation concepts in service firms with that in manufacturing firms are scarce. Even though, this result does not mean that market orientation in manufacturing firms should receive more attention than in service firms (Kirca et al., 2005). Though there has been less investigation about market orientation construct within service sectors, Kumar et al. (1998) concluded that there is a direct relationship within large service firms, especially within the health care sector.

A change is pervasive, and innovation facilitates the process of adapting too many of these changes. Innovation is anything which might be an idea, practice, activity, or

object that is perceived as new to an individual, organization, or any other unit of adoption (Fruhling and Siau , 2007; Hsu ,2006) .

Recent studies indicated that product innovation, service innovation, process innovation, marketing innovation and administrative innovation are the most widely studied innovation capabilities (Lin et al., 2010). Among that classification is service innovation, which is the process of developing new services that will be perceived as new (never seen before), as well as are useful and gainful to specific central customer (Flint et al., 2005; Grant, 1991).

Jaworski and Kohli (1996) concluded that the consequences of market orientation are categorized into four outcomes: organizational performance, customer consequences, innovation consequences, and employee consequences.

Our concentration here in this research is upon innovation, or more particularly service innovation. Despite the fact that several studies approved that the link between market orientation and innovation seems more complex (Martin and Grbac, 2003; Slater and Narver, 2000).

The purpose of this study is to measure the levels of (1) market orientation and (2) service innovation, in addition to investigate the effect of market orientation on service innovation within Information and Communication Technology (ICT) sector in Jordan. Multi-dimensions of market orientation from the literature will be used to investigate the effect of it on service innovation.

1.2. Research Problem

Organizations are living in a dynamic environment in which they experience an accelerated changes, intensive competition and powerful external and internal forces. In such circumstances, survival is conditioned upon knowledge, experience, technology, creativity, qualified human resources, innovation, and many other capabilities (Laforet and Tann, 2006).

Innovation, specifically, is one of the major factors that may enhance organizations position, since significant innovations permit firms to have a dominant competitive positions, and grants new entrants a unique opportunity to gain an edge in the market place. The idea is how to reinforce innovation? One of the proposed components to backup innovation is market orientation.

Market orientation is a construct to generate new ideas and motivation in order to respond to the environment and promote innovativeness (Hurley and Hult, 1998). Consequently, this research is directed to study the effect of market orientation on service innovation, specifically within Information and Communication Technology (ICT) sector in Jordan as it is an "innovation-driven market growth". To do so, the researcher seeks to answer the following questions:

1- To what extent does the Information and Communication Technology (ICT) Sector in Jordan implement (1) market orientation and (2) service innovation?

2- What is the effect of market orientation on service innovation within Information and Communication Technology (ICT) Sector in Jordan?

3- What is (are) the most influential element(s) of market orientation elements which might affect on service innovation within Information and Communication Technology (ICT) sector in Jordan?

1.3. Research Importance

The importance of this study stems form the following features:

1- This study is concerned about studying basically the effect of market orientation on service innovation.

2- The tendency nowadays is to explore the relationships between market orientation and many other factors like motivation, completing organizations mission, and customer satisfaction rather than traditional studies which focus on performance and profitability.

3- The theoretical contribution through combining two views of market orientation which are most widely discussed and used , that are the cultural perspective (Narver and Slater 1990) and the behavioral perspective (Kohli and Jaworski 1990) , in order to measure the level of market orientation and its effect on service innovation within ICT sector in Jordan.

4- There is an increasing interest toward ICT sector from all levels here in Jordan because of its increasing contributions like many other emerging industries, so ICT sector needs to maximize its utilities and exploit each opportunity that can enhance its position in this unsteady environment (Intaj.net).

Thus, the researcher will introduce market orientation models to this sector because of its paramount advantages and especially there effects on service innovation, since service providers have to respond frequently and effectively to customers needs and to react positively to changing customers requests.

1.4. Research Objectives

The main goal of this research is to investigate the effect of market orientation on service innovation within Information and Communication Technology (ICT) sector in Jordan.

To achieve this goal, the following objectives will be performed:

1- Measuring the levels of (1) market orientation and (2) service innovation within Information and Communication Technology (ICT) sector in Jordan.

2- Investigating the effect of market orientation on service innovation in the Information and Communication Technology (ICT) sector in Jordan.

3- Identifying the most influential elements of the market orientation elements on service innovation within Information and Communication Technology (ICT) sector in Jordan.

1.5. Limitations of the study

1- The scarcity of domestic previous studies examining the current topic.

2- Difficulties in gaining access to marketing and sales departments within selected companies.

3- The findings are limited to Information and Communication Technology (ICT) industry, so we should be careful about over generalizing the finding from a single industry, and future research could investigate the extent to which our framework holds in other industries.

1.6. Research Outline

This research consists of five chapters, distributed as follow:

Chapter one is the introduction in which an overview is presented in terms of the research problem, objectives, limitations and its importance, in addition to the opening background of the study.

Chapter two is the literature review which presents the theoretical background foundation for the main variables, the theoretical concepts and previous related studies are the major two parts of this chapter.

Chapter three is the methodology which clears up the research theoretical framework and hypotheses as soon as independent and dependent variables explanations, in addition to the methods of data gathering and measurements.

Chapter four is the data analysis where the collected data will be statistically analyzed using the SPSS statistical tools.

Chapter five is the results, discussion, recommendations, and implications.

Chapter Two

Literature Review

(Theoretical Concepts & Previous Relevant Studies)

2.1. Introduction

This chapter presents the theoretical background foundation for the main variables of the current study which are market orientation and service innovation, in addition to establishing the base for the model of the current research. The two main parts of this chapter are: the theoretical concepts, which highlight the theoretical concepts related to the main variables (e.g. historical roots, definitions, main components, measurements, etc), and the second part presents previous related studies.

2.2. Theoretical Concepts:

2.2.1 Market Orientation

2.2.1.1. Market Orientation: Historical View

Market orientation becomes an eminent topic in the marketing literature, its significance basically comes from the idea that market orientation focuses on defined, detailed, deep understanding and shared knowledge about people who are beneficiaries of an organization (Govan, 2006).

The origins of some elements about modern business and marketing practices are referring back to the ancient Greeks, the Phoenicians and the Venetian traders. Adam smith in 1700s clears up the "marketing concept" in its earliest literatures, he as a distinguished economist focused on the idea that customer is the core element within business and its target. Referring back to the 1950s, marketing concept came to be the philosophical foundation for those who were interested in marketing field (Heiens, 2000), and then advocators of the marketing concept emphasized heavily on the principle that creating a satisfied customer must be the main purpose of business (Drucker 1954, Keith1960, Levit 1960).

Recently, marketing academics and practitioners started to constitute a body of research on the concept of market orientation, with a strong relation to marketing

concept antecedents and performance consequences (Deshpande and Webster 1989, Jaworski and Kohli 1993, Narver and Slater 1990). Kholi and Jaworski (1990) distinguished between marketing concept as a business philosophy, and market orientation as the actual implementation and application of the marketing concept.

That was a starting point (customer is the primary focus of market orientation), then subsequent researchers included exogenous factors that influence customer needs to expand the concept, some of these factors are competitors and government regulations (Kohli and Jaworski 1990, Lusch and Lazniak 1987, Slater and Narver 1994).

2.2.1.2. Market Orientation: Definitions:

Researchers in marketing concluded that market orientation is a foundation for marketing decisions (Shapiro, 1988); a group of distinctive behaviors, activities, and practices (Kohli and Jaworski, 1990), a set of beliefs (Deshpande et al., 1993), superior skills (Day, 1994), a resource (Hunt and Morgan, 1995), a feature of organizational culture (Slater and Narver, 1995), a set of behaviors and processes (Deshpande and Farely, 1998). The subsequent researchers also emphasized on the basic idea that market orientation is focusing on and assessing customer needs. So you find that:

"Market orientation is the set of cross-functional processes and activities directed at creating and satisfying customers through continuous needs-assessment". (Deshpande and Farley, 1998, p 213).

According to Green and Inman (2006) market orientation combined two broad dimensions, which are customer focus and needs assessment. Based on Kohli and Jaworski (1990) market orientation includes market intelligence generation which relates to customers current and future needs, dissemination of market intelligence across departments and finally organization responsiveness. It is important to note that they do not consider market orientation as an aspect of organizational culture.

On the other hand, Slater and Narver (1995,p.67) defined market orientation as " the culture that (1) places the highest priority on the profitable creation of superior customer value while considering the interests of other stakeholders; and (2) provides norms for behavior regarding the organizational development and responsiveness to market information".

Days (1994, p.43) view is that " a market driven culture supports the value of thorough market intelligence and the necessity of functionally coordinated action directed at gaining a competitive advantage", this identification is consistent with Slater and Narver, since this definition considers market orientation as an aspect of organizational culture and indicates that market orientation and learning organizations together will reinforce performance (Hurely and Hult, 1998). Table (1) presents further of market orientation definitions in literature.

Table (1) Market Orientation Definitions in Literature

Market orientation definitions	Authors
"the culture that most effectively and efficiently creates the behaviors for the creation of superior value for buyers", "market orientation consists of three behavioral components- customer orientation, competitor orientation and inter-functional coordination, and two decision criteria which are long term focus and profitability"	Narver and Slater(1990,pp.20-21)
"the organization wide generation of market intelligence pertaining to current and future needs of customers, dissemination of intelligence horizontally and vertically within the organization, and organization wide action or responsiveness to market intelligence"	Kohli et al.(1993,p.467)
"superior skills in understanding and satisfying customers"	Day (1994,p.37)
"a set of beliefs that puts the customers interest first, while not excluding those of all other stakeholders such as owners, managers and employees in order to develop a long term profitable enterprise"	Deshpande et al.(1993p.27)

"(1)the systematic gathering of information on customers and competitors, both present and potential, (2)the systematic analysis of the information for the purpose of developing market knowledge, (3)the systematic use of such knowledge to guide strategy recognition, understanding,cretion, selection, implementation and modification"	Hunt and Morgan (1995,p.11)
"organization – wide generation of market intelligence pertaining to customers, competitors, and forces affecting them, internal dissemination of the intelligence and reactive as well proactive responsiveness to the intelligence"	Jaworski and Kohli (1996,p.131)
"a set of behaviors and processes related to continuous assessment and serving customer needs"	Deshpande and Farley(1998,p.226)
"the extent to which an organization is perceived to act in a coordinated, customer and competitor – oriented fashion"	Harris(2002,p.247)

Adopted from Sorensen, 2009.

2.2.1.3. Antecedents of Market Orientation:

The antecedents of market orientation can be classified into three categories: top management factors, interdepartmental factors, and organizational systems (Jaworski and Kohli, 1993).

Formulating values and orientation of an organization is the responsibility of top managers (Webster, 1988), e.g. as soon as top managers focus on market orientation we can expect a positive impact upon the level of application of market orientation (Day 1994; Narver and Slater, 1990). Both interdepartmental connectedness and conflict represent interdepartmental factors, in which interdepartmental connectedness reflects the level of formal and informal communications among employees and across departments such these practices will enhance market orientation because of more information using and sharing (kennedy,et al., 2003).

On the other hand, interdepartmental conflicts which represent the level of strain between various departments that comes from conflicting goals, and poor effective responses to market needs which is the core for market orientation concept (Jaworski and Kohli, 1993). The final element of antecedents is organizational systems, which composed of two dimensions: formalization and centralization, and two employee related systems, market-based rewards systems and market-oriented training (Jaworski and Kohli, 1993).

2.2.1.4. Consequences of Market Orientation:

The consequences of market orientation can be classified into four broad categories, which are: organizational performance, customer consequences, innovation consequences, and employee consequences (Jaworski and Kohli, 1996).Organizational performance represents both cost-based performance measures, and revenue-based performance measures (Jaworski and Kohli, 1993).

Customer consequences include the perceived quality of products, customer loyalty and customer satisfaction with the firm's products and services (Jaworski and Kohli, 1993, 1996).

Innovation consequences include firms innovativeness; which reflect their ability to find and implement new ideas, products, and processes (Hult and Ketchen 2001); and new product performance techniques (Im and Workman 2004). Market orientation approach should play the role of reinforcement and the motivator toward organizations innovativeness, since it will lead to progress and proactive disposition to satisfy customer needs and wants and it stresses on more information sharing and using (Atuahene-Gima, 1996; Han, et al., 1998).

The fourth element of market orientation consequences is employee consequences which encompasses creating the feelings and emotions of pride, friendship, and esteem among employees (Jaworski and Kohli, 1993).

2.2.1.5. Market Orientation Measurement:

"while there are at least five views on market orientation in the literature " (lafferty and Hult,2001,p.94), the first two views are the most widely discussed and used, which are the cultural perspective (Narver and Slater 1990) and the behavioral perspective (Kohli and Jaworski 1990).

Some of researchers (Day, 1994; Dickson, 1996; Jaworski and Kohli, 1996) involved within a contention about: if market orientation would be considered as an organizational culture or as behaviors, actions, or processes. That debate might be resolved partially by Slater and Narver (1995, p.67) contribution in which they distinguished between organizational culture and climate, while they considered culture as "the deeply rooted set of values and beliefs that provide norms for behavior within the organization", they defined climate as "how the organization operationalises its culture, structures, and processes". Though they concluded that their distinction is vague to some extent, they stressed at the same time that both culture and climate should enhance each other. Nevertheless, identifying organizational climate as "a set of processes" is consistent with market orientation definitions in terms of processes and activities; also it is parallel with the perspective that market orientation can be considered as an organizational climate variable. This finding is harmonious with Avlonitis and Gounaris (1999) who concluded that a real market orientation is a synthesis of attitudes and activities, and both of them are related to each other.

As a result of considering market orientation as an organizational climate variable, this has an effect upon the contribution of innovation to performance (Matear et

al.,2002).So that market orientation can be viewed as a contextual factor (Oliver,1997) which can reinforce strategic assets like innovation capacity.

Table (2) Alternative Conceptions of Market Orientation
(Components of Market Orientation)

Components of market orientation	Authors
Generation of market intelligence Dissemination of market intelligence Entire organizations capacity to respond	Kohli and Jaworski (1990)
Customer oriented Competitor oriented Inter – functional coordination	Narver and Slater (1990)
Customer oriented Competitor oriented Inter – functional coordination Profit oriented	Deng and Dart(1994)
Information gathering and analysis on : Final customers, distributors, competitors, environment, and inter – functional coordination strategic actions on: final customers, distributors, competitors and environment.	Lambian(1996)and Lado, Maydeu-Olivares and Rivera(1998)

Source: Lado and Maydeu-Olivares, 2001.

When the culture is absent the behavior also will be absent because of lack of reinforcement (Narver and Slater 1990; Lafferty and Hult 2001; Matsuno, et al., 2005).The question here is which one comes before the other? Behavior or culture, there seems to be little to choose from these two models, though the isolation is acknowledged many times, considerable researchers present the two models in tandem to reflect market orientation as a concept (Bennett 1998; Sui and Wilson 1998; Homburg and Pflesser 2000; Gonzalez, et al., 2002, Vazquez, et al., 2002; Matsuno et al., 2005; Mavondo, et al., 2005), others synthesize both of them to present a new model (Ruekert 1992; Lafferty and Hult 2001) as well as some researchers defend the use of a combined model for their studies (Gonzalez et al., 2002; Vazquez et al., 2002).

Recently, researchers emphasized that dealing with market orientation as a group of behaviors, activities and practices rather than as a feature of organizational culture may

benefit the organization though both view points are precious (Hurley and Hult, 1998). According to Jaworski and Kohli (1996) study which discussed the differences between two perspectives, they find out that both of them have merit.

2.2.2 Service Innovation:

2.2.2.1. Innovation:

Innovation is anything which might be an idea , practice , activity ,or object that is perceived as new to an individual , organization , or any other unit of adoption (Fruhling and siau,2007;Hsu,2006).

Weerawardena (2003) recognized that innovation is the adjustment of product, service, process, organizational systems, and marketing systems so as creating and enhancing customer relationships through upgrading customer value. Green et al. (1995) also considered innovation as a multi-dimensional concept where producers concentrating their efforts on product, process, and service to apply gradual adjustment, minor modifications and product lines expansions.

Even though, innovation analysis in service sector is a difficult task for two view points. The first one: the analysis of technological innovation in manufacturing activities was the basis upon which the innovation theory has been constructed. The second point is that: the unique service activities characteristics, specifically the fuzzy nature of their output, make it more difficult to be measured according to the well known, familiar economic methods and to realize improvements or changes, specifically on the qualitative level (Gallouj and Weinstein, 1997).

There are two major aspects of innovation which are: the degree of innovation and scope of innovation.

The degree of innovation is categorized into: radical and incremental innovation .Radical innovation is the creation of a totally new product, new service, new market, or

new technology (Green et al., 1995). Within the incremental innovation the general structure of the system still the same, but it changed through the addition or substitution of characteristics to improve the systems performance.

The area of innovation capability composed of technical innovation and administrative innovation (Damanpour, 1991).

Technical innovation contains products, services, marketing as well as technology used to create products or render services which are directly related to the organizations core processes (Damanpour and Evan, 1984; Daft, 1982). On the other hand administrative innovation related to the administrative activities and organizational structure which are indirectly connected to the core tasks within the organization (Damanpour and Evan, 1984).

2.2.2.2. Innovation Importance:

Laforet and Tann (2006) recognized that innovating new products is the main reason behind surviving and thriving of many small British and medium – size firms. Thus, that conclusion is consistent with the argument that small firms which innovate successfully will maximize their opportunities of prosperity and survival (De Jong et al., 2004). Though, the task of developing a successful innovation for those firms is complex or challenging when they do not have the mentality and knowledge about how to invest in research and development or cannot frequently transfer the research and development findings into successful innovations (Avermaete et al., 2003).

A successful business must be innovative in its nature for the following reasons: (1) to learn more and pursue customers needs and wants, (2) to conduct successfully the process of developing new products or services that address those needs and wants and (3) to help in executing internal activities and processes that enhance product development process and customers needs understanding (Narver, et al., 2004)

2.2.2.3. Innovation Capability Assortment:

Product innovation, service innovation, process innovation, marketing innovation and administrative innovation are the most widely studied innovation capabilities (Lin et al., 2010).

(1) product innovation : is the introducing totally new product or the modification of current ones in terms of quality , function , features , or consistency (Liao et al . , 2007).

(2) Service innovation: manufacturers' efforts in different innovation activities to upgrade customer satisfaction, such as after sale service, warranties, and order placement systems (Gopalakrishnan and Damanpour, 1997).

(3) Process innovation: finding and enhancing the techniques and methods of production, and the adoption of new components to the organizations production process. (Damanpour, 1996).

(4) Marketing innovation : it relates to pricing strategy , promotions , distribution techniques , market segmentation , market research as well as marketing information systems (Vorhies and Harker , 2000; weerawardena , 2003).

(5) Administrative innovation: it relates to the alterations in organizational structure or administrative processes (Damanpour, 1992; Gopalakrishnan and Damanpour, 1997).

2.2.2.4. New Perspectives about Service Innovation:

Since we are living in an increasingly service- centered economy, service innovation plays a key role in keeping and enhancing organizations competitive advantage. Though service innovation concept has get much more attention and discussion than ever before in which researchers developed several service innovation typologies, these efforts still

rooted in the goods- versus- services perspective. Researchers recently have presented several new perspectives about service innovation.

Table (3) New Perspectives about Service Innovation

Perspectives about service innovation	Authors
Emphasizing culture and organization	Norman(2001); Kandamplly(2002); De Jong and Vermeulen(2003); De Vries(2006)
Experiential dimensions	Pine and Gilmore (1999); Schmitt(1999)
Customer knowledge integration in the value creation processes	Pressl(2000); Prahalad and Ramaswamy(2004); Zeithaml et al.(2006); Edvardsson et al.(2007); Gronroos(2007)
Interrelations and networks among organizations	Van Der Aa and Elfring (2002); Gummesson (2004); Love and Mansury (2007); Tether and Tajar (2008).

Source: Sebastiani and Paiola, 2010.

De Jong and Vermeulen (2003) suggested that service innovation is not only about newness or singularity but also includes another dimensions like after sales services, delivering systems and the relationships between clients and sellers. That suggestion is consistent with Verma et al. (2008) who concluded that service innovation can be explained through the newness in the service concept, processes, customer knowledge and experience, technology, business model, employee experiences and business procedures.

2.2.2.5. Service Innovation versus Product Innovation:

Moving from product orientation towards service orientation is a logical result, since the current focus is upon customer relationships rather than transactions (Neu and Brown, 2008).

Service innovation differs from product innovation in three main points. (1) For those services which heavily depend on service providers, the real providers are part of service itself and then they represent a part of innovation. (2) service usually requires customers availability ,which will affect on the innovation process (3) service

innovators in many times do not have a tangible product which have a brand name as such for a tangible product (Berry et al ., 2006).

According to Berry et al. (2006) there are nine drivers of successful service innovations, which are:

1- A scalable business model.

2- Inclusive customer-experience management.

3- Investment in employee performance more and more.

4- Enduring operational innovation.

5- Brand differentiation and

6- Continuous strategic innovation.

7- Have a common path to customer affordability.

8- Outstanding customer benefit.

9- An innovation champion.

Service innovation starts with culture:

The success of service innovation drivers demands an organizational culture which reinforces innovation and the human performance of employees within organization must has the confident to take risk and to has the freedom to discuss their thoughts ,beliefs, and suggestions with anyone at any level in organizations, in order to create something new (Berry et al., 2006).

2.2.2.6. Service Innovation Process

Service innovation constitutes of two interrelated levels: how to innovate and what to innovate. If we have a sufficient understanding of what customers actually need or want, then we need to have an effective tools and methods to develop and implement those ideas (Andreassen and Streukens, 2009).

According to Cumming (1998) and Ahmad (1998) innovation process starts with idea generation, then developing that idea into a valuable construct and eventually implementing that construct successfully. In the subsequent research, Zeithaml et al. (2006) discussed the actual stages which could be pursued within any sort of services development. The process (service development) can be divided into two types of activities, the first one is the front end planning which includes: idea generation, concept development and valuation, and business analysis, then the second one is the implementation stage which includes: service development and testing, market testing, commercialization, and post- introduction evaluation. Even though, the development process is not constant over the time, it needs to be adopted; also it should be objective, fact driven, precise, and methodological (Panesar and Markeset, 2008).

Panesar and Markeset (2008) summarized the four different stages of the innovation process and activities which are: initiation (idea collection), evaluation, development and implementation.

2.2.2.7. Service Innovation: Decision Maker's Perspective

Ulaga (2001) stated that market orientation is the art of managing organizations resources in order to provide superior value to customers. Accordingly, being a market oriented firm leads to effective understanding for the elements which contribute to create customer value, customer satisfaction and eventually customer retention (Slater and Narver, 1995).

According to Lusch et al. (2007) as soon as customers ultimately specify the value of the service innovation, it is the firm which is liable for developing and implementing value propositions in addition to controlling the dual- value creation process. Consequently, decision makers constantly have to be innovators especially within a current environment, which described as competitive, complex, dynamic, and uncertain

environment. Managers can accomplish this task by arraying firms' resources with market needs and wants in order to emphasize their business success. Within the context of innovation, the decision making process and its consequences will be affected by the strategic orientation of the organization, managers perception of the environmental uncertainty, market orientation of the firm and by the traditional perspective goods-versus- services dichotomy versus a more integrated view (Paswan et al.,2009).

2.2.2.8. Successful Service Innovation

Successful innovation management is not an easy task, good performance has to be achieved within five fields (innovation strategy, creativity and idea management, selection and portfolio management, implementation management and human resource management) and to be sure that these efforts are integrated (Goffin and Pfeiffer,1999).

There are several success factors enhancing service innovation: the first one depending on senior managers who frequently stimulate service innovation, since leadership mentality affects heavily by encouraging employees to adopt service innovation construct (De Brentani, 2001), the second one is "service champions "because of their effects in organizing for service innovation, as soon as they will play a crucial role at the implementation stage within service development programs (De Jong and Vermeulen, 2003).

2.2.2.9. Service Innovation Measurement

It is well known that services have been viewed differently from goods. Intangibility, inseparability, heterogeneity and perishability are the major service characteristics which cause the differences in search properties, credence, measurement and experience (Zeithaml et al., 2006).

Researchers have adopted several approaches to operationalize the service innovation concept, some of these are:

Table (4) Operationalizing Service Innovation Concept

Approach	Authors
Reactive – proactive continuum	Hunt and Morgan (1996)
Product- process dichotomy	Damanpour (1988)
Novelty- meaningfulness	Sheth (1981)
Incremental- radical	Garcia and Calantone(2002)
New service development processes	Johne andStorey(19998);Matthing(2004)

Source: Paswan et al. 2009.

Basically, there are two approaches to examine the service innovation construct. The first approach which is largely discussed in compare with the second approach in which few studies are presented and discussed. That one (first approach) approached service innovation from the point of view of those who are in the firm (internally) and the second one approached service innovation from the point of view for those who are outside the firm (externally) (Paswan et al.,2009).

Table (5) Approaches to Examine Service Innovation Construct

First approach (internally)such as:	Authors
New service development teams satisfaction	Avlonitis et al.(2001); Blazevic and Lievens(2002); Van Der Vegt and Jonssen(2003)
Internal evolutions of consumer attitudes	Sethi et al.(2001)
Other variables representing the firms perspectives	More(1982); Rothwell and Gardiner(1988); Cooper and De Brentani(1991); Garcia and Calantone(2002)
Second approach (externally)	Price and Brodie(2001); Matthing et al.(2004)

Source: Paswan el al., 2009.

Recent researches endorsed that incorporating both internal (firm) and external (customer) perspectives for these new service development projects is the most favorable approach (Alam and Perry, 2002).

2.2.3. Market Orientation and Service Innovation:

According to Matear et al. (2002) the relationship between market orientation and innovation has recently received particular attention. Compared with the increasingly body of work about the relationship between market orientation and service firm performance, studies about the relationship between market orientation and innovation is predominantly product oriented, with a prominent exception which has done by Han et al.(1998) and later by Lado and Maydeu- Olivares (2001). In addition to both contributions of Gatignon and Xuereb (1997) and Atuahene- Gima (1996) in which they examined mixed product and service firm samples.

Being disentangled the terms of market orientation and innovation, researchers discuss the extent to which market orientation contributes to innovation (Matear et al., 2002). Considerable findings (Atuahene- Gima, 1996; Gatignon and Xuereb, 1997; Lukas and Ferrel, 2000) support the positive relationship between market orientation and innovation. A huge part of this research is consistent with Gatignon and Xurebs (1997) point of view which implies that the relationship between market orientation and innovation is recursive, so that market orientation does not make a contribution directly to firms performance and its contribution to innovation is adequate to be valuable. On the other hand, most of this research did not inspect if market orientation makes a contribution to firm performance, as soon as to its contribution to innovation (Matear et al., 2002).

Market orientation as an antecedent to innovation referring pack to Jaworski and Kohli (1993,p.56)they suggested that , since " a market orientation essentially involves doing something new or different in response to market conditions , it may be viewed as a form of innovative behavior ". Jaworski and Kohli in their elementary research do not recognize innovation frankly in their models, then they deemed that market

orientation is an antecedent to innovation after that , though they considered innovation as an outcome of market orientation, they did not think that innovation is a special feature of a groups culture (Jaworki and Kohli,1996).on the other hand, Kohli and Jaworski (1990) suggested that a greater degree of market orientation will lead to a greater level of superior performance based on innovation, as a result of periodic reviewing of customer preferences and competitors activities, disseminating that information within organization and responding to it. This finding is consistent with Kandampully and Duddy (1999) who suggested that market oriented firms have the capabilities to anticipate new preferences or Lukas and Ferrell (2000) are aware of competitors activities before the others, also can imitate their recent innovation or develop new service offerings if imitating competitors becomes clear and easy to do.

The question here, since market orientation depends on innovation, why that dimension is absent in current market orientation models?

Recent studies suggested that it is inappropriate to ignore the innovation speed in the models of market orientation. According to Slater (1997, p.165)" successful innovation is the product of a market oriented culture coupled with entrepreneurial values". And Jaworski and Kohli (1996) suggested in their recent studies that it is unacceptable to deem innovation is absent in models of market orientation.

2.3. Previous Relevant Studies:

One of the prominent attempts to investigate the relationship between market orientation and innovation is the empirical study of Hurley and Hult (1998) in which they presented a conceptual framework to incorporate constructs that pertain to innovation in market orientation research. Researchers tested crucial relationships in that conceptual framework upon a sample which composed of 9648 employees from 56 organizations within a large agency of the U.S federal government. The results clarified that there is a high positive correlation levels between the levels of innovativeness in firms culture and capacity for adaptation and innovation measured by the number of successful innovations, also they concluded that higher levels of innovativeness are usually accompanied with cultures which emphasize learning, development, and dual decision making processes. In addition to, the results indicated that innovation is important for understanding market orientation and organizational learning, and that relationship should be examined in the context of culture. Finally, they suggested that it is beneficial to incorporate innovation constructs more directly into market orientation researches.

Panesar and Markeset (2008) study used a collection of information from both literature and the Norwegian oil and gas industry. A study based on a survey and guided interviews. They concluded that finding innovative solutions to complex organizational and technological difficulties is a necessity as a result of accelerated changes and developments.

The results indicated that market needs and customer initiatives are the most important service innovation process drivers, and the most important activity to support service innovation is customer's feedback. in addition to that, service innovation (either creating new services or improving the existing services) is a result of interaction, this

finding is consistent with Kuusisto and Meyer (2003); Gronroos (2000), who conclude that the key points for service innovation and performance enhancement are the dual generation of knowledge and joint problem solving practices. Finally, service innovation process is complex because it depends heavily upon management and coordination for a large number of interorganizational activities and interactions between different managerial levels, as well as service innovation process depends heavily on deliberated planning and detailed understanding of customers' needs, wants, and preferences.

Kandampully (2002) stressed that customer- focused firms are capable to create new and better ways to serve their customers. The results indicate that technology, knowledge and networks constitute a crucial group of variables which energize innovation in service firms, since the combined influence of technology, knowledge and networks renders the organization the capability to concentrate its resources on the future (expected or unexpressed customer needs). Though the fact that service innovation results in increasing customer expectation, and then establish a self created challenge. The most important point is that service innovation results only when organization is capable to concentrate all its capabilities to think in behalf of their customers.

Ordanini and Maglio (2009) used a qualitative comparative analysis technique to address their study question that was: which sets of alternatives among the three decision nodes- customer and market orientation, internal process organization and external networks- are more amenable to maximize the success of new service development (NSD) processes, the researchers constituted their research upon Menor and Roth (2007,p.826) definition of new service development which is "an offering not

previously available to the firms customers that results from either an addition to the current mix of the services or from changes made to the service delivery process".

The researchers applied their new service development framework in the context of hospitality services, they concluded that there are two sets of crucial conditions to create a successful new service development constructs within service firms which are: (1) the availability of a proactive market orientation and a formal top- down innovation process, with the absence of responsive market orientation and (2) the availability of both proactive and responsive market orientation, in addition to open innovation model. They stressed that despite the result which stated that proactive market orientation is a significant condition, there is no single factor can be considered as a sufficient condition to have a success new service development construct.

Atuahene-Gima (1996) performed an empirical study which reported upon a cross-sectional survey of a sample of 600 firms (300 services and 300 manufacturing), research sample composed of independent firms and business units of huge multisided firms in Australia. The hypothesis were examined using path analysis according to a series of regression for the total sample and for both product and service innovation samples. Study findings are consistent with the prior idea that market orientation influence is pervasive and it is not limited to a certain organizational processes or activities. They concluded that there is a strong direct impact of market orientation on the performance of innovation, though that influence is insignificant on market success when mediated by innovation characteristics. They found that market orientation is not a panacea for ineffectiveness in the innovation process, that notion does not indicate that market orientation is unimportant construct for service- product innovation but it stressed that it is a necessity to integrate more factors before testing the impact of market orientation on service- product performance or organizations performance.

The surprising conclusion for the researcher was a little support of his prior prediction that market orientation will make a stronger contribution to the performance of service innovation than product innovation.

Junarsin (2010) presented another paper which discusses key issues to be considered in the service innovation construct. He concluded that innovation in service sector is crucial and can reinforce the company's competitive position. He concentrated upon six critical issues which must be taken into account in the service innovation process that are: (1) intangibility of services, (2) inhomogeneity, (3) perishability, (4) multifaceted nature, (5) variations in customer contact, (6) gaps within service quality. Consequently, increasing customer inputs to the overall processes – starting point of market orientation construct- is one of the paramount strategies that can be adopted to enhance service innovation management.

Chapter Three

Research Methodology

3.1. Introduction

This chapter presents the following points: research theoretical framework, operational definitions for the main variables, hypotheses, research type and scale, research population, research sample and unit of analysis, study horizon, sources of data, data collection instrument which is the questionnaire and its components, in addition to specifying data analysis techniques. Finally, examining the reliability and validity of study scales.

3.2. Research Theoretical Framework

Based on the literature which discuss the main variables (market orientation and service innovation), the researcher concluded that the cultural perspective which includes primarily: customer orientation, competitor orientation, and inter-functional coordination(Narver and Slater, 1990) and the behavioral perspective which includes primarily: intelligence generation, intelligence dissemination, and intelligence responsiveness(Kohli and Jaworski, 1990) are the two views on market orientation which are most widely discussed and used. Accordingly the researcher combined both of them to measures the level of market orientation and its effect on service innovation within Information and Communication Technology (ICT) sector in Jordan.

Despite the fact that considerable findings (Atuahene-Gima, 1996; Gatignon and Xuereb, 1997; Lukas and Ferrel, 2000) support the positive relationship between market orientation and innovation, still there are gaps: is innovation directly related with market orientation or is it just an intermediary variable, and what about relationships between market orientation and many types of innovation, such as service innovation which has been discussed from a conceptual perspective though it has received little empirical study (Grawe et al., 2009).

Consequently, this study seeks to minimize that gap by investigating the effect of market orientation on service innovation, and to fulfill the research objectives the researcher developed the following theoretical framework.

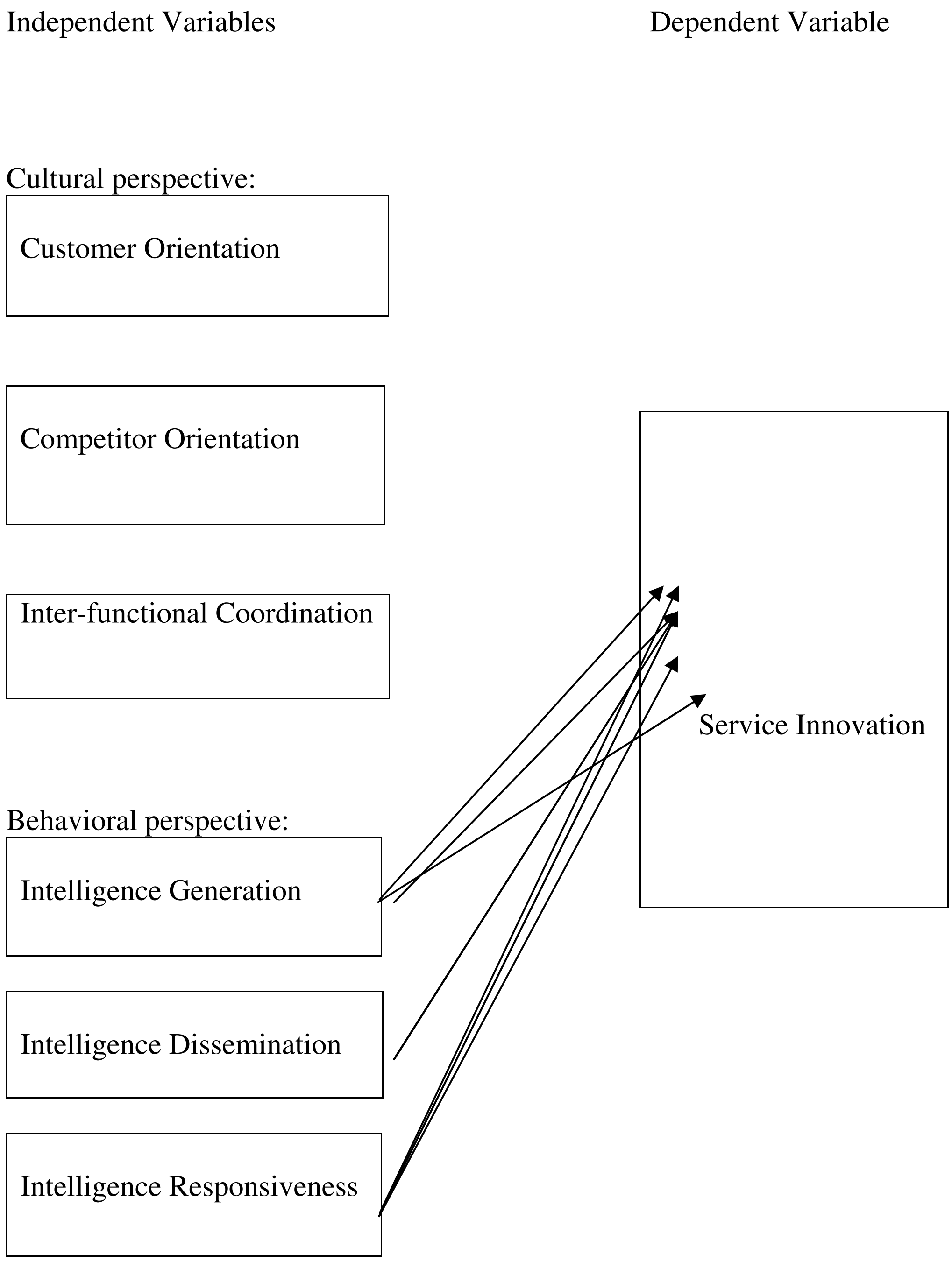


Figure (3.1): Research Theoretical Framework

3.3. Operational Definitions

The current study used different scales to measure the main variables (independent variables and dependent variable), scales used to measure the research constructs were drawn from the available literature, and are outlined in the following table:

Table (6): Supported Literature for Measurement Scales

variables	Supported literature	Variables measurement
Independent variables :		
Customer orientation	Adopted from Narver and Slater, 1990.	Measured by questions 1-6 in the questionnaire.
Competitor orientation	Adopted from Narver and Slater, 1990; Olson et al., 2005; Porter, 1980.	Measured by questions 7-11 in the questionnaire.
Inter-functional coordination	Adopted from Narver and Slater, 1990.	Measured by questions 12-16 in the questionnaire.
Intelligence generation	Adopted from Jaworski and Kohli, 1993.	Measured by questions 17-23 in the questionnaire.
Intelligence dissemination	Adopted from Jaworski and Kohli, 1993.	Measured by questions 24-29 in the questionnaire.
Intelligence responsiveness	Adopted from Jaworski and Kohli, 1993.	Measured by questions 30-40 in the questionnaire.
Dependent variable:		
Service innovation	Adopted from Grawe et al., 2009. (Service innovation capabilities)	Measured by questions 41-45 in the questionnaire.

Independent Variables:

The independent variables for this research which used to measure market orientation are:

- Customer orientation : an organizational culture that encouraging better identification and communication with targeted customers which will lead to enduring creation of customer value (Narver and Slater, 1990). Customer oriented – firms generate intelligence related to the current and future customers needs then distributing that knowledge throughout the firm. As a result of understanding their customers' needs, they can share information with other parties to ensure the quick response to current needs and anticipate future needs. A crucial element of customer orientation is the concentration upon supply chain opportunities and obstacles from customer's point of view. (Denshpande et al., 1993; Narver and Slater, 1990) .Questions 1-6 were used to measure customer orientation.
- Competitor orientation : an organizational culture that emphasizes the full understanding of short term strengths and weaknesses and long term capabilities , abilities and strategies for both current and potential competitors (Denshpande et al ., 1993 ; Narver and Slater , 1990) . Questions 7-11 were used to measure competitor orientation.
- Inter-functional coordination: Coordinated utilization of company's resources in order to create and exploit the learning, and then ultimately creating superior value to customers. That coordinated integration of resources is closely related to the customer and competitor orientations since they are distributing customers experiences among departments (Narver and Slater, 1990).Questions 12-16 were used to measure inter-functional coordination.
- Intelligence generation: This is the starting point of market orientation. It is the extent to which a firm gathers primary and secondary data from every obtainable

source, mainly from the organizations stakeholders such as customers, competitors, suppliers, and intermediaries in addition to market forces like social, cultural, economical, political, legal, technological and many other forces (Matsuno et al., 2000). Intelligence generation relates to both current and future needs, and that generation depends not only on customer survey, but also on a group of complementary mechanisms. Also, intelligence generation is not the exclusive responsibility of marketing department (Kohli and Jaworski, 1990) .Questions 17-23 were used to measure intelligence generation.

- Intelligence dissemination: The extent, to which information is communicated, distributed, shared, and discussed among marketing department and other departments through formal and informal tools (Moorman, 1995; Akgun et al., 2002). Slater and Narver (1995) suggested that firms which collect more and more information from their customers and competitors have the ability to enhance their speed and effectiveness in responding to opportunities and threats, it is also equally important to disseminate that intelligence to the interested parties in a timely manner. Questions 24-29 were used to measure intelligence dissemination.

- Intelligence responsiveness: is the behaviors and activities taken as a reaction to generated and disseminated intelligence, there are two phases: - response design and response implementation. Importantly, all departments participate in responding to current and future needs and wants in a market- orientated firms (Kohli and Jaworski, 1990). Questions 30-40 were used to measure intelligence responsiveness.

Dependent Variable:

Service innovation: is the process of developing new services that will be perceived as new (never seen before), and are useful and gainful to a specific central customers (Flint et al., 2005; Grant, 1991). Also, service innovation can be considered as an organizational value, which includes both of innovation in organization for existing service products as customer requests or to fulfill organizations goals, and innovation in processes (Gadrey et al., 1995). Questions 41-45 were used to measure service innovation.

3.4. Hypotheses

The study aims mainly to investigate the effect of **market orientation (customer orientation, competitor orientation, inter-functional coordination, intelligence generation, intelligence dissemination and intelligence responsiveness)** on **service innovation**, the study is hypothesized as follow:

The main Hypothesis

$H_{0.1}$: There is no statistically significant effect of **market orientation** on **service innovation**.

- ### The sub-Hypotheses

$H_{0.1.1}$: There is no statistically significant effect of **customer orientation** on **service innovation**.

$H_{0.1.2}$: There is no statistically significant effect of **competitor orientation** on **service innovation**.

$H_{0.1.3}$: There is no statistically significant effect of **inter-functional coordination** on **service innovation**.

$H_{0.1.4}$: There is no statistically significant effect of **intelligence generation** on **service innovation**.

$H_{0.1.5}$: There is no statistically significant effect of **intelligence dissemination** on **service innovation**.

$H_{0.1.6}$: There is no statistically significant effect of **intelligence responsiveness** on **service innovation**.

3.5. Research Type and Scale

The research focuses on testing the effect of market orientation on service innovation. It is a hypothetico-deductive and correlated study depending mainly on cause and effect relationship, in which relationships and influence (cause and effect) between variables measured by using a multifaceted scale adopted from various prior researches. For each variable, a set of questions were adopted from another researchers to operationalize the study construct. The five point likert scale used in this research, where (1) represents "does not apply", (2) represents "applies to a small extent", (3) represents "applies to a medium extent", (4) represents "applies to a large extent", and (5) represents "applies totally".

3.6. Research Population

The population of this study is defined as all Intaj members that are included within Information and Communication Technology (ICT) sector in Jordan, which are 184companies till February 2011.

(int@j) is the Information Technology Association of Jordan which was founded in the year 2000 as an industry-support association for Jordan's ICT sector. Building on the nation's core asset of highly educated and skilled human resources. int@j envisages for Jordan's ICT sector to establish the position of a leading regional ICT hub and an internationally recognized exporter of ICT products and services. int@j's mission is to advance and promote the constituents it represents in both, the local and global markets.

The association realizes its mission through positively influencing policy and legislation, offering capacities building programs, carrying out local and regional marketing activities, and providing members with value-added services that help them grow and prosper (intaj.net). Table (7) shows the research population. (Table (7) was attached in the appendix).

The Information and Communication Technology (ICT) sector is appropriate to study market orientation and its effect on service innovation, since that field is characterized by dynamism, because of accelerated changes and many new firms entering that area. As well as innovation is the main reason behind surviving and new products thriving of many small, medium- size firms (Laforet and Tann, 2006) and on the other hand a considerable findings (Atuahene- Gima, 1996; Gatignon and Xuereb, 1997; Lukas and Ferrel, 2000) support the positive relationship between market orientation and innovation as a whole.

The ICT field is an area that is seen as an opportunity in which Jordan can increase its competitive advantage over other countries in the region. Consequently, Jordan has taken very serious steps in order to launch its major ICT initiatives aiming at developing the ICT sector (Intaj.net).

3.7. Research Sample and Unit of Analysis

Some of intaj members directory were excluded from the beginning before specifying the final research population since they are not specialized in ICT services rather they are beneficiaries from intaj services and facilities as a result of their memberships like: 4PS Integrated Marketing Communications, Abu Ghazaleh & Co., Akhtaboot, Aramex International Curier, Foursan Group, Khalifeh & Partners, LEMS Jordan, Nugul Group, Oasis 500, Pixels Media, Pinnacle Business and Marketing

Consulting, Riyada for Business Development, Sanad Law Group, Sight and Sound, and Sukhtian Group.

Other companies were excluded from the final research sample for many reasons. Table (9) shows some of the excluded companies and the reasons behind that.

Table (9) Reasons Behind the Exclusion of Some Companies

Company Name	Reason behind exclusion
Accelerated Technology Holdings, Adaptive Techsoft, AL Failq for Information Technology, AL Nasher Technical Services, Arabiacell, Business Plus Plus, Central E- Commerce, Convergence Consulting & Technology, Cubic Art Technologies, Ideation Box, Infograph, life Long- Medical, MAYSALWARD(MRD), National Net Ventures, NewTeck Solutions, Oriented Solutions, Rubikamm Telecom Solutions, Semantic Intelligent Technologies, Spring Web Technologies, Technosys, VTEL Holdings Company, Y- Consult.	Not applicable (no existence of the designated positions)
Beecell AL- Mutatwera for Mobile Application, Believe Soft, Dama Max, Dot..jo, , ESKADENIA Software, In4ma Software, International Turnkey Systems, Jabba Internet Group, JO SAFE, Progress Soft Corporation, Quality Business Solutions, Systems & Electronic Development, TE Data Jordan, Trans Jordan for Information Technology & Development, Wizards Productions, Younivate.	No response
TakTek Games, Jadeer Training	Too recent
Arab academy for Microsoft technologies, At your Service, Ericsson AB, Global Technology, Jordan scientific company for Tech dev., Offtec Group, Sigma Soft Inc, World Software Co.	Problems in contact

After that only 50 companies from the remaining companies were fully cooperative to fulfill the research objectives successfully on timely basis. Table (8) shows that fifty

companies and their establishment dates (Table (8) was attached in the appendix). So that researcher disseminated 300 questionnaires within that 50 companies upon key respondents (unit of analysis) who are employees within marketing and sales department in that companies.

3.8. Study Horizon

The horizon for this study was from July 2010 till March 2011.

3.9. Sources of Data

Data needed for this research were of two kinds:

- Secondary Data: which were collected from several sources such as: Journals, periodicals, databases, and other archival records.
- Primary Data: those data were collected by disseminating a questionnaire which was prepared to fulfill the current study objectives. The respondents were all employees within marketing and sales departments in fifty companies.

3.10. Data Collection Instrument (The Questionnaire)

Questionnaire is the data collection instrument which the researcher used to collect responses from the study sample. The questionnaire was originally designed in English language, and then it was translated to be finally distributed in Arabic language.

The final questionnaire has been developed through several stages:

(1) Explorating the literature which discuss the main variables in order to specify the most appropriate independent and dependent variables and their scales.

(2) Reviewing the websites and contact directly with many ICT companies, to better specify their characteristics and their homogeneity with study objectives.

(3) Preliminary questionnaire was designed and presented to academic specialists who have knowledge about the topic.

(4) After modifications have been done, a pilot study was performed by disseminating questionnaire upon some representative employees within selected companies. That test was followed by some modifications.

(5) The questionnaires were finally distributed in Arabic language to study sample after making all required modifications.

3.11. Components of Questionnaire

The questionnaire starts with a letter to identify the purpose of the study which might lead to increase response rate and answers reliability, in addition to asking respondents kindly to be cooperative in fulfilling the questionnaire subjectively, then appreciating respondents' efforts.

After that, the questionnaire consists of two main parts:

(1) The first part represents the demographic variables of the respondents and their companies which are: gender, age, educational level, experience level, company age, and company size (number of employees).

(2) The second part consists of 45 questions to cover all main variables of this study. Table (10) shows the second part components.

Table (10) The Second Part Components of the Questionnaire

The Variable	Question Number
Independent variables	
Customer orientation	1-6
Competitor orientation	7-11
Inter-functional coordination	12-16
Intelligence generation	17-23
Intelligence dissemination	24-29
Intelligence responsiveness	30-40
Dependent variable	
Service innovation	41-45

The questionnaire of this study was attached in the appendix.

3.12. Data Analysis Techniques

Before starting data analysis, the researcher coded the collected data, so that computer could understand that form. The data has been analyzed using SPSS V.17 program. The researcher used different descriptive and inferential statistical techniques to analyze data which are:

(1) Descriptive statistics to describe the sample characteristics and to identify to what extent does market orientation and service innovation exist in the Information and Communication Technology sector in Jordan by using: frequency, percent, mean, and standard deviation.

(2) Inferential statistics to measure the correlations between independent variables and dependent variable, in addition to test the study hypothesis by using mainly multiple regression analysis.

3.13. Validity and Reliability of Scales

3.13.1 Validity of Scales:

(1) The researcher disseminated the research questionnaire in Arabic and English languages attached with the research problem, objectives, theoretical framework, hypothesis, and operational definitions upon a number of academic people who have a knowledge about the research topic to assess the ability of the questionnaire to measure what it is supposed to measure, that is, to ascertain the validity of the study instrument, then that group of academic people presented their feedback which resulted in a minor modifications.

(2) Pilot Study :

Pilot study is a mini version of a full- scale study (feasibility of study), in addition to that it is a pre-testing of a research instrument like questionnaire. It is important to note that performing a pilot study does not secure study success, but it increases the probability (Teijlingen and Hundley, 2001).

The researcher performed a pilot study with 15 employees within four companies from the research sample. The researcher met the employees according to a predetermined appointment. At the beginning the researcher presented herself and her research topic within 15 minutes, then disseminating the research questionnaire to discuss all its items with employees and asking them to give their feedback after fulfilling questionnaires to identify unnecessary, difficult or ambiguous questions.

The researcher conducted a pilot study:

(1) To check the feasibility of the research.

(2) To avoid wasting time and money on an inappropriate designed research as much as possible.

(3) To improve the questionnaire design by eliminating or adjusting unnecessary, difficult or ambiguous questions according to employee's feedback.

(4) To check that each question is understood as the researcher wants.

(5) To estimate the time taken to fulfill the questionnaire in order to decide if it is reasonable.

3.13.2. Reliability of Scales:

A measure is reliable when you get similar results over time and across situations (Zikmund, 2003).More specifically, reliability is the extent to which a research measures are free from error and yield consistent results (Peter, 1979). Repeatability and internal consistency are the two dimensions which underlie the reliability construct (Zikmund, 2003).

Cronbach's alpha is a measure of internal consistency, which indicates how closely related a set of items or as a group. It is used to estimate the proportion of variance that is systematic or consistent in a set of test scores. Cronbach's alpha is not a statistical test; rather it is a coefficient of reliability or consistency.

Cronbach's alpha reliability coefficient normally ranges between 0 and 1. The closer Cronbach's alpha coefficient is to 1 the greater the internal consistency of the items in the scale. Table (11) showed Cronbach's Alpha values, all values are greater than (0.60) which is good because it is greater than the accepted percent (0.60).

These results mean that the internal consistency reliability was good and acceptable and can be considered to be reliable to achieve the research objectives.

Table (11) Reliability statistics

Study Scales	Cronbach's Alpha Values
Customer orientation	0.646
Competitor orientation	0.699
Inter-functional coordination	0.604
Intelligence generation	0.751
Intelligence dissemination	0.658
Intelligence responsiveness	0.744
Service innovation	0.672
For all items	0.931

Chapter Four

Data Analysis
&
Research Findings

4.1. Introduction

Chapter four is concerned about presenting the analysis for the collected primary data. Before starting the analysis, it is important to know that the researcher distributed 300 questionnaires by hand, fax and e-mail upon the respondents, while she delivered 258 questionnaires which means that the response rate was 86%, but she excluded 8 of them because of their inadequacy for statistical analysis, so 83.3% was the response rate upon which the analysis was executed.

Primary data were collected, coded, entered and analyzed using the statistical package for social sciences (SPSS) program version 17.

This chapter includes the answers to all of the research questions, in addition to hypotheses testing.

4.2. Descriptive Analysis

The research descriptive analysis consists mainly of two parts: the first part presented the sample characteristics according to their demographic variables which were collected through the first part of the study questionnaire. Those demographic variables were: gender, age, educational level, experience level, company age, and company size. The second part of the descriptive analysis allocated to investigate the levels of (1) market orientation and (2) service innovation within ICT companies in Jordan.

4.2. 1. Frequency Distribution Analysis for the Study Sample

(1) Gender

Table (12) The Frequency Distribution, Percentage of Gender

Category	Frequency	Percentage
Male	174	69.6
Female	76	30.4
Total	250	100.0

Based on the findings in table (12), the gender distribution of the research respondents who fulfill the questionnaire was male 174 (69.6) while the percentage of female 76 (30.4). Males represented the majority of the study sample; this conclusion is consistent with the Hashemite Kingdom of Jordan Department of statistics (DOS) for the year 2009 which states that 83.9 is the percentage of Jordanian male work force compared with the percentage of 16.1 of females.

(2) Age

Table (13) The Frequency Distribution, Percentage of Age

Category	Frequency	Percentage
18-24	6	2.4
25-29	64	25.6
30-34	100	40.0
35-39	53	21.2
40-44	24	9.6
More than 44	3	1.2
Total	250	100.0

According to age variable, the percentage of employees between the age of 30-34 was 40.0 (the highest percentage) followed by the category of 25-29 with the percent of 25.6 and then the category of 35-39 with the percentage of 21.2. Sum of those percentages equals 86.8 (40.0+ 25.6+ 21.2) which confirmed the findings of the Hashemite Kingdom of Jordan Department of statistics (DOS) for the year 2009: the highest percentage of Jordanian work force (either male or female) is within the age categories of 20-29 and 30-39, and that the private sector provides more job opportunities than ever before and more than the public sector. While the lowest percentage was 1.2 represented by (more than 44 years) age category.

(3) Educational Level

Table (14) The Frequency Distribution, Percentage of Educational Level

Category	frequency	Percentage
Secondary school	0	0
Diploma	2	.8
Bachelor	221	88.4
Master	21	8.4
Doctoral	6	2.4
Total	250	100.0

Based on the findings in table (14) which related to the employees educational level, the highest percentage of 221 (88.4) was for bachelor category and the lowest percentages were 0 for secondary school and only 2 (.8) for diploma. The total percentage of 99.2 (88.4+ 8.4+ 2.4) of the study sample was university graduates. No one have only secondary school certificate and only 2 have a diploma certificate. The conclusion is that higher education qualifications are required for labor force in ICT companies. The nature of work within that type of service firms requires higher level of educational qualifications and really most employees within this study sample fall in university graduates (bachelor, master, and doctoral).

(4) Experience Level (within the current job)

Table (15) The Frequency Distribution, Percentage of Experience Level

Category	frequency	percentage
Less than 5 years	60	24.0
5-9	104	41.6
10-14	60	24.0
15-19	19	7.6
20-24	6	2.4
More than 24 years	1	.4
Total	250	100.0

Table (15) illustrated the distribution of respondents according to the years of experience within their current jobs, it is clear that the highest percentage 104 (41.6) was for (5-9) category, and the lowest percentage 1 (.4) was for (more than 24 years)

category.60 (24.0) percentages represented the categories of (less than 5 years) and (10-14), 19 (7.6) percentage represented the category of (15-19), and 6 (2.4) percentage represented the category of (20-24). This result is consistent with the employee's age within this sample. (Younger employees with lower levels of experience measured by the number of years), also this result enhanced the notion that (ICT) sector in Jordan provides more and more of employment opportunities for young people, especially the university graduates category – according to the Hashemite Kingdom of Jordan Department of statistics (DOS) for the year 2009- .

(5) Company Age

Table (16) The Frequency Distribution, Percentage of Company Age

Category	frequency	percentage
Less than 5 years	31	12.4
5-9	92	36.8
10-14	66	26.4
15-19	19	7.6
20-24	12	4.8
More than 24 years	30	12.0
Total	250	100.0

Regarding the company age variable which mentioned in table (16), (5-9) category represented the highest percentage 92 (36.8), while (20-24) category represented the lowest percentage 12 (4.8) and the category of (less than 5 years) represented 31 (12.4) and the category of (10-14) represented 66 (26.4) and the category of (15-19) represented 19 (7.6) and the category of (more than 24 years) represented 30 (12.0).

(6) Company Size

Table (17) The Frequency Distribution, Percentage of Company Size

Category	Frequency	percentage
Less than 25 employees	66	26.4
25-50	78	31.2
51-75	13	5.2
76-100	22	8.8
101-125	0	0
More than 125 employees	71	28.4
Total	250	100.0

Based on the results in table (17) which represented the company size variable, it is clear that (25-50) category represented the highest percentage 78 (31.2) while (101-125) category has 0 frequencies and then the category of (51-75) has a percentage of 13 (5.2). Other categories were: (less than 25 employees) category with the percentage of 66 (26.4) and (76-100) category with the percentage of 22 (8.8) and (more than 125 employees) category with the percentage of 71 (28.4). This clearly proves that the majority of Jordanian ICT companies are small and medium size firms.

4.2.2. The level of Implementation for the Main Variables

As mentioned previously, this part is concerned about answering the first question of the study which is" To what extent does the Information and Communication Technology (ICT) sector in Jordan implement (1) market orientation and (2) service innovation? " . The researcher depends on mean and standard deviation to measure the levels of application, since mean is the most widely used measure of central tendency which concerned about the way in which quantitative data tend to cluster around some value and standard deviation is the most common measure of dispersion which simply shows the relation that set of data has to the mean of the sample, because dispersion measures are concerned generally with the spread of values around the central tendency.

*The Level of Market Orientation – Variables and their Items

Note: The researcher considered (3) as the mean of the scale (1+2+3+4+5/5), which means that 3 represents a medium level, less than 3 is a low level, and greater than 3 is a high level (this applied for all study scales).

The researcher started with a presentation for the level of market orientation according to the cultural perspective (Narver and Slater, 1990) and the behavioral perspective (Kohli and Jaworski, 1990), in addition to the general level of market orientation (combined both cultural and behavioral perspectives).

Table (18) Means, Standard Deviations and Levels of Implementation for Market Orientation Construct

Independent variables	Means	Std. deviations	Levels of implementation
Cultural perspective (Narver and Slater, 1990)			
Customer orientation	3.87	.615	High
Competitor orientation	3.86	.657	High
Inter-functional coordination	3.85	.624	High
For all variables (cultural perspective)	3.86	.632	High
Behavioral perspective (Kohli and Jaworski, 1990)			
Intelligence generation	3.91	.602	High
Intelligence dissemination	3.96	.583	High
Intelligence responsiveness	3.86	.578	High
For all variables (behavioral perspective)	3.91	.588	High

For all variables (cultural and behavioral perspectives)	3.89	.610	High

The results showed that the level of implementation for market orientation concept is high, since the means for all variables (individual or combined) were higher than 3 and their standard deviations were lower than 1. The cultural perspective has a lower mean of 3.86 and a higher standard deviation of .632 compared with the behavioral perspective which has a mean of 3.91 and a standard deviation of .588. Though the differences were minor and the level of implementation is still high. Consequently, the general level of implementation for the market orientation concept (combined both cultural and behavioral perspectives) is high with a mean of 3.89 and a standard deviation of .610. This means that these companies have a high level of implementation for the market orientation concept.

Among the cultural perspective variables, Customer orientation variable has occupied the highest mean of 3.87 and the lowest standard deviation of .615, followed by the competitor orientation variable with a mean of 3.86 and a standard deviation of .657. While among the behavioral perspective variables, intelligence dissemination variable has the highest mean of 3.96 with a standard deviation of .583 (and it has the highest mean among all market orientation variables). Because intelligence generation equals nothing unless it is disseminated effectively and there is no efficient response without effective dissemination.

Now, the researcher will present the level of implementation for each dimension of market orientation construct and their items.

Table (19) Means, Standard Deviations and Levels of Implementation for Customer Orientation Items

Question No.	Items	Means	Std. deviations	Levels
1	We constantly monitor our level of commitment and orientation to serving customers needs.	4.07	.518	High
2	Our business objectives are driven primarily by customer satisfaction.	3.96	.648	High
3	Our strategy for competitive advantage is based on our understanding of customer needs.	3.86	.550	High
4	Our business strategies are driven by our beliefs about how we can create greater value for customers.	3.78	.759	High
5	Measuring customer satisfaction is a systematic and frequent function.	3.79	.656	High
6	Our company gives close attention to after sales services.	3.75	.557	High

Slater and Narver (1990,p.67) defined market orientation as "the culture that (1) places the highest priority on the profitable creation of superior customer value while considering the interests of other stakeholders; and (2) provides norms for behavior regarding the organizational development and responsiveness to market information". According to the previous definition, it is clear that customer orientation is the core element within market orientation construct. Means of all items for this variable were higher than 3, and their standard deviations were lower than 1, which means that Jordanian ICT companies apply extensively customer orientation principle. Table (19) showed that item number (1) has the highest mean 4.07 and the lowest standard deviation .518 , which indicates that companies heavily monitor the levels of commitment and orientation to serve their customers needs, since market orientation derived its significance from the idea that it focuses on defined, detailed, deep

understanding and shared knowledge about people who are beneficiaries of an organization (Govan, 2006), while item number (6) has the lowest mean 3.75 and a standard deviation of .557 - though the level of implementation for this item is still high - , this item concerned about company's attention to after sales services.

Table (20) Means, Standard Deviations and Levels of Implementation for Competitor Orientation Items

Question No.	Items	Means	Std. deviations	Levels
7	Our salespeople regularly collect information concerning competitors' activities (either current or potential competitors).	3.94	.409	High
8	Company's top management regularly discusses competitors' actions.	3.89	.696	High
9	We frequently track the general performance of key competitors.	3.78	.759	High
10	We frequently evaluate the strengths of key competitors.	3.88	.680	High
11	We regularly attempt to identify competitors' strategies using many tools.	3.80	.739	High

The results for competitor orientation items in table (20) showed that the highest mean of 3.94 with the lowest standard deviation of .409 was for item number (7), it might be a logical result aroused mainly from the notion that the number of salespeople within marketing and sales departments of the selected companies is higher than marketers' number, and they spend most of their working times outside companies. So, they are capable to collect more and more information about competitors' actions and activities. Competitor oriented firms adopt the culture which emphasizes the full understanding of short term capabilities, abilities and strategies for both current and potential competitor (Denshpande et al.,1993; Narver and Slater, 1990).while the

minimum mean 3.78 with a standard deviation of .759 was for item number (9) – though the level of implementation of this item is still high - .

Table (21) Means, Standard Deviations and Levels of Implementation for Inter-functional Coordination Items

Question No.	Items	Means	Std. deviations	Levels
12	All of our business functions (e.g., marketing, sales, manufacturing, research and development, etc) are integrated in serving the needs for our target markets.	3.90	.664	High
13	All of our business functions and departments are responsive to each others needs and requests.	3.81	.518	High
14	Managers from each department regularly visit our current and prospective customers.	3.93	.627	High
15	We frequently communicate information about our successful and unsuccessful customer experiences across all business functions.	3.78	.616	High
16	Our managers understand how every one in our business can contribute to create customer value.	3.83	.697	High

Market oriented firms emphasized coordinated utilization of company's resources in order to create and exploit learning, and then ultimately creating superior value to customer (Narver and Slater, 1990). The results in table (21) showed that the level of implementation for inter-functional coordination concept is high. Item number (14) has the highest mean 3.93 and a standard deviation of .627, it indicates that all departments within that companies are concerned about market orientation – it is not only a responsibility of marketing and sales department but also all other working departments- . while item number (15) has the lowest mean 3.78 and a standard

deviation of .616 – though the level of implementation for this item is still high-, it might be explained by "the organizational structure: how job tasks are formally divided, grouped, and coordinated" (chain of command, span of control, centralization and decentralization, work specialization, departmentalization, and formalization) (Robbins and Judge, 2007,p.538), its elements –organizational structure- may impede communicating the information across all business functions.

Table (22) Means, Standard Deviations and Levels of Implementation for Intelligence Generation Items

Question No.	Items	Means	Std. deviations	Levels
17	we meet with customers at least once a year to find out what products or services they will need in the future.	3.98	.363	High
18	Individuals from our manufacturing department interact directly with customers to learn how to serve them better.	3.96	.648	High
19	We work actively to detect changes in our customers' product preferences.	3.78	.758	High
20	We collect industry information through informal means (e.g., personal letters, meetings and interviews).	3.93	.474	High
21	Intelligence on our competitors is generated collectively by several departments.	3.78	.759	High
22	We work regularly to detect fundamental shifts in our industry (e.g., competition, technology, regulation) .	3.95	.593	High
23	We periodically review likely effect of changes in our business environment on customers.	3.96	.616	High

Intelligence generation relates to both current and future needs and that generation depends not only on customer survey, but also on a group of complementary mechanisms, as well as it is not the exclusive responsibility of marketing department (Kohli and Jaworski, 1990). Based on the findings in table (22) the results showed a

high level of implementation for the intelligence generation items. The highest mean 3.98 with a standard deviation of .363 was for item number (17), it might be attributed to the fact that business shifted to a customer-centered ,"sense-and-respond" philosophy rather than a product- centered "make-and-sell" philosophy (Kotler and Keller, 2009). While the lowest mean 3.78 was for items (19) and (21) with a standard deviations of .758 and .759 respectively- though items means are still high and their standard deviations are still low- .

Table (23) Means, Standard Deviations and Levels of Implementation for Intelligence Dissemination Items

Question No.	Items	Means	Std. deviations	Levels
24	We have interdepartmental meeting at least once a quarter to discuss market trends and developments.	4.03	.580	High
25	Marketing personnel in our business unit spend time discussing customers future needs with others functional departments.	4.05	.543	High
26	When something important happens to major customer or market, the whole business unit knows about it in a short period.	3.77	.739	High
27	Data on customer satisfaction are disseminated at all levels in this business unit on regular bases.	3.90	.427	High
28	Our company's culture maximizes the importance of communication between marketing and manufacturing departments concerning market developments.	4.02	.594	High
29	When one department finds out something important about competitors, it is fast to alert other departments.	3.98	.617	High

Effective intelligence dissemination is important, since it provides a shred basis for concerted action by different departments (Kohli and Jaworski, 1990). The results in table (23) showed that the intelligence dissemination implementation is high, with the

highest mean 4.05 and a standard deviation of .543 for item number (25) which asked about marketing personnel efforts in discussing customers future needs with other functional departments, this finding is consistent with items (24) and (28) contents which have a similar means 4.03 and 4.02 and a standard deviations of .580 and .594 respectively. That conclusion assures the idea that market orientation activities are not exclusive responsibility upon marketing department, and that these companies communicate and disseminate the market intelligence by marketing department to other departments. While item (26) has the lowest mean 3.77 with the highest standard deviation of .739, it might be explained by some difficulties or problems within organizational structures which might affect negatively upon communication speed.

Table (24) Means, Standard Deviations and Levels of Implementation for Intelligence Responsiveness Items

Question No.	Items	Means	Std. deviations	Levels
	A – Response design			
30	For one reason or another we tend to be careful about changes in our customers' product or service needs.	3.77	.610	High
31	We periodically review our product development efforts to ensure that they are in line with what customers want.	3.81	.500	High
32	Our business plans are driven more by market research than by technological advances.	3.65	.668	High
33	Several departments get together periodically to plan a response to changes taking place in our business environment.	4.08	.504	High
34	The product lines we sell depend more on real market needs than internal politics.	3.69	.573	High
	Total response design	3.80	.571	High
	B – Response implementation			
35	If a major competitor intends to launch an intensive campaign targeted our customers,	4.08	.509	High

	we will implement a response immediately.			
36	The activities of different departments in this business are well coordinated.	3.98	.658	High
37	Responding effectively to customers complaints is considered a necessary requirement for business success.	3.74	.615	High
38	When we came up with a great marketing plan, we are able to implement it in a timely fashion.	3.61	.593	High
39	When we find out that our customers are unhappy with the quality of our service, we take corrective action immediately.	3.93	.640	High
40	When we find that customers would like us to modify a product or service, the departments involved make concerted efforts to do so.	4.10	.490	High
	Total response implementation	3.91	.584	High
	Total responsiveness	3.86	.578	High

Intelligence responsiveness is the behaviors and activities taken as a reaction to generated and disseminated intelligence, there are two phases: response design and response implementation (Kohli and Jaworski, 1990; 1993).

Table (24) showed a high level of implementation for this variable as a whole, mean was 3.86 with a standard deviation of .578. It is clear that the difference in application of the two phases is very low, since the mean of response design was 3.80 and a standard deviation of .571 and the mean of response implementation was 3.91 with a standard deviation of .584, since each phase complements the other one. Referring back to the first phase, item (33) has the highest mean 4.08 and a standard deviation of .504, on the other hand item (40) has the highest mean 4.10 and a standard deviation of .490 within the second phase. It is notable that items (33) and (40) concentrated upon the same idea which was: responding quickly and effectively to changes taking place in business environment, and this finding reinforced the notion that these stages are

integrated. While the lowest mean 3.65 with a standard deviation of .668 was for item (32) in response design stage, and the lowest mean 3.61 with a standard deviation of .593 was for item (38) in response implementation stage. Generally, inability to implement a great marketing plan in a timely fashion, can be explained by other factors rather than inadequate level of market orientation – though their means are still high and their standard deviation are still low - .

Dependent Variable: Service Innovation

Table (25) Means, Standard Deviations and Levels of Implementation for Service Innovation Items

Question No.	Items	Means	Std. deviations	Levels
41	Innovation is readily accepted in our program / project management.	4.08	.513	High
42	Our company's top management gives special emphasis to service innovation.	3.94	.683	High
43	Our company constantly seeks new ways to better service our customers.	3.79	.656	High
44	Our company is able to change (modify) our current service approaches to meet special requirements of customers.	3.83	.699	High
45	Compared to our competitors, our company is come up with new service offerings.	3.80	.612	High
	Total service innovation	3.89	.633	High

The results in table (25) showed that service innovation mean was 3.89 with a standard deviation of .633. The results were considered high. The results showed that the highest mean was 4.08 with the lowest standard deviation of .513 for item number (41), which demonstrates that innovation (as a whole) is extensively adopted within selected companies, as one of their core values or as a strategic element within

companies cultures. While the lowest mean 3.79 with a standard deviation of .656 was for item number (43).

4.3. Inferential Statistics: Testing Hypotheses

This part is concerned about answering the second question of the research problem which is " What is the effect of market orientation on service innovation within Information and Communication Technology (ICT) sector in Jordan?" and the third question which is " What is (are) the most influential element(s) of market orientation elements which might affect on service innovation within Information and Communication Technology (ICT) sector in Jordan?".

Multiple linear regression analysis was used to test the research main and sub-hypotheses of this study. Multiple regression enables researcher to examine the effect of many different factors (independent variables) on certain outcome (dependent variable) at the same time. The general goals behind using the multiple regression method were to learn more about the relationship between several independent variables and a dependent variable, also to investigate the functional relationships between independent and dependent variables, in order to understand what might be causing the variation in the dependent variable.

At the beginning, the researcher used the model summary and the analysis of variance (ANOVA) to assess the model fit and its overall significance in order to test the main hypothesis of this study.

Note: the abbreviations for each study variable are as follow:

Customer: customer orientation

Competitor: competitor orientation

Coordination: inter-functional coordination

Generation: intelligence generation

Dissemination: intelligence dissemination

Responsiveness: intelligence responsiveness

Innovation: service innovation

The Main Hypothesis:

$H_{0.1}$: There is no statistically significant effect of market orientation on service innovation.

Table (26) Model summary

Model	R	R square	Adjusted R square	Std. Error of the estimate
1	.860	.740	.734	.21514

a: predictors: (constant), customer, competitor, coordination, generation, dissemination, responsiveness.

Table (27) Analysis of Variance (ANOVA)

Model	Sum of squares	df	Mean square	F	Sig.	Result
Regression	32.086	6	5.348	115.537	.000	Reject the main null hypothesis
Residual	11.247	243	.046			
Total	43.334	249				

a: predictors: (constant), customer, competitor, coordination, generation, dissemination, responsiveness.

b: dependent variable: innovation

correlation coefficient R is a statistical technique which shows whether and how strongly pairs of variables are related to each other, here the correlation coefficient R = .860 which means that there is a strong positive relationship between market orientation

(as a whole) and service innovation. On the other hand, coefficient of determination (R square) presents the proportion of the variation in the dependent variable explained by the regression model. Here in this study, R square = .740 which means that 74% of the variability of service innovation has been explained by the market orientation dimensions, it indicates to the goodness of fit of the study model since increasing the level of implementation of market orientation will increase the level of implementation of service innovation. Adjusted R square value of this study equals .734 which is very similar to R square value= .740, since adjusted R square values always less than or equal R square, it means that if the model has been fitted when the whole population participates rather than those who responded in the study, there will be .006 (.740 - .734) less variance in the model outcome. . Adjusted R square is generally considered to be more accurate goodness- of – fit measure than R square

Referring back to table (27) which enabled the researcher to test the main null hypothesis. It is clear that F- value for the collected primary data was 115.537 which is significant at the level of $p < 0.05$ (sig. =.000). Consequently, the researcher rejected the main null hypothesis and accepted the main alternative hypothesis which means that there is a statistically significant effect of market orientation on service innovation.

Table (28) Coefficients

Model	standardized coefficients	Unstandardized coefficients		t	Sig.	Result
		B	Std. Error			
(constant)		.176	.214	.823	.411	
Customer	.433	.485	.083	5.846	.000	Reject the null hypothesis
Competitor	.555	.493	.065	7.646	.000	Reject the null hypothesis
Coordination	.353	.405	.067	6.036	.000	Reject the null hypothesis
Generation	.165	.177	.091	1.948	.53	Accept the null hypothesis
Dissemination	.311	.361	.082	4.386	.000	Reject the null hypothesis
Responsiveness	.097	.132	.061	2.143	.033	Reject the null hypothesis

Table (28) started with an estimation of beta for each independent variable of this study. It gives a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. Competitor orientation, customer orientation and inter-functional coordination (cultural perspective) represented the highest beta values which were .555, .433, .353 respectively. While, intelligence responsiveness, intelligence generation and intelligence dissemination (behavioral perspective) represented the lowest beta values which were .097, .165, .311 respectively. So that Competitor orientation, customer orientation, and inter-functional coordination have the highest contributions in the research model.

The second part of table (28) demonstrated t and sig. values, which give a rough indication of the impact of each predictor variable. A big absolute (t) value and a small (p) value indicate that a predictor variable is having a large effect on the criterion

variable. The researcher depended on the significant level of each variable to test the research sub- hypotheses.

The Sub- Hypotheses

Note: the decision rule is to reject the sub- null hypothesis if the significant level is equal to or less than 0.05, and then to accept the sub- alternative hypothesis.

$H_{0.1.1}$: There is no statistically significant effect of customer orientation on service innovation.

Based on the findings of table (28) the null hypothesis will be rejected and the alternative hypothesis accepted, since the significant level is .000 , which means that there is a statistically significant effect of customer orientation on service innovation.

$H_{0.1.2}$: There is no statistically significant effect of competitor orientation on service innovation.

Based on the findings of table (28) the null hypothesis will be rejected and the alternative hypothesis accepted, since the significant level is .000, which means that there is a statistically significant effect of competitor orientation on service innovation.

$H_{0.1.3}$: There is no statistically significant effect of inter-functional coordination on service innovation.

Based on the findings of table (28) the null hypothesis will be rejected and the alternative hypothesis accepted, since the significant level is .000, which means that there is a statistically significant effect of inter-functional coordination on service innovation.

$H_{0.1.4}$: There is no statistically significant effect of intelligence generation on service innovation.

Based on the findings of table (28) the null hypothesis will be accepted and the alternative hypothesis rejected, since the significant level is .53 , which means that there is no statistically significant effect of intelligence generation on service innovation.

$H_{0.1.5}$: There is no statistically significant effect of intelligence dissemination on service innovation.

Based on the findings of table (28) the null hypothesis will be rejected and the alternative hypothesis accepted, since the significant level is .000, which means that there is a statistically significant effect of intelligence dissemination on service innovation.

$H_{0.1.6}$: There is no statistically significant effect of intelligence responsiveness on service innovation.

Based on the findings of table (28) the null hypothesis will be rejected and the alternative hypothesis accepted, since the significant level is .033, which means that there is a statistically significant effect of intelligence responsiveness on service innovation.

4.3.1. Muticollinearity Analysis

Table (29) Collinearity Statistics

Independent variables	Tolerance	VIF
Customer orientation	.195	5.134
Competitor orientation	.202	4.941
Inter-functional coordination	.312	3.200
Intelligence generation	.149	6.724
Intelligence dissemination	.213	4.696
Intelligence responsiveness	.518	1.931

Multicollinearity is a statistical phenomenon in multiple regression analysis, it emerges when one or more of the independent variable(s) is (are) highly correlated with one or more of other independent variables. Multicollinearity arises if there is a high level of correlation (either positive or negative) between two or more independent variables.

Tolerance and Variance Inflation Factor (VIF) are the most widely used measures to assess multicollinearity. Tolerance is the proportion of variance in the independent variable which is not explained by its relationships with the other independent variables. According to Hair et al.(2003) the minimum cutoff value for tolerance is typically (0.10), that is, a tolerance value less than 0.10 should be investigated further.

Variance Inflation Factor (VIF) measures how much the variance of the regression coefficients is inflated by multicollinearity problems. To assess that value, there are 2 criteria, one more relaxed and the other more conservative. More conservatively, it is favorable that (VIF) values be lower than 5, on the other hand a more relaxed criterion is that they be lower than 10 (Hair et al.1987; Kline, 1998). For this study, the

researcher depends on the rule of thumb which suggests that if the (VIF) values are greater than 10, then there is a multicollinearity problem (more relaxed criterion).

The multicollinearity test for the six components of market orientation construct (customer orientation, competitor orientation, inter-functional coordination, intelligence generation, intelligence dissemination and intelligence responsiveness) was accomplished and all (VIF) values were less than (10), and tolerance values were more than (0.10) as shown in table (29). So that, there is no collinearity within collected data, which in result reinforced the model by avoiding the problem of having interchangeable beta values between independent variables and then there was no bias.

Chapter Five

Results, Discussion, Recommendations and Implications

5.1. Introduction

This chapter is concerned about presenting and discussing the research results according to what have been explored within chapter four and then demonstrating the recommendations and implications which built upon the research findings.

5.2. Results and Discussion

This section is divided into two parts, the first part is concerned about answering and discussing the first question of the research problem and the second part is concerned about answering and discussing the second and third questions of the research problem.

5.2. 1. The Extent of Implementation of Market Orientation and Service Innovation

Descriptive analysis indicated that there is a strong positive tendency towards market orientation, since its mean was 3.89 with a standard deviation of .610 (table 18) which represented a high range of application. To be more specific, the cultural perspective of market orientation has a lower mean 3.86 with a standard deviation of .632 (table 18) than the behavioral perspective of market orientation with a mean of 3.91 and a standard deviation of .588 (table 18). This finding confirmed the notion that the cultural perspective and the behavioral perspective are the most widely used and discussed for market orientation. Also, it is consistent with the conclusion that: researchers emphasized that dealing with market orientation as a group of behaviors, activities and practices rather than as a feature of organizational culture may benefit the organization though both view points are precious (Hurley and Hult, 1998).

After examining the results, it is clear that the highest degree of implementation was for customer orientation with a mean of 3.87 (table 18) , because creating value and keeping the satisfied customers are the major goals for market oriented firms (Day,

1994), followed by competitor orientation with a mean of 3.86 (table 18) . Several researchers considered customer orientation and competitor orientation as crucial strategic orientations (Sorensen, 2009), consistent with Hunt and Lambe (2000) who suggested that market orientation is the marketing's contribution to business strategy, and the lowest degree of implementation was for inter-functional coordination (according to the cultural perspective). While (according the behavioral perspective) the highest degree of implementation was for intelligence dissemination with a mean of 3.96 (table 18) and the lowest degree of implementation was for intelligence responsiveness with a mean of 3.86 (table 18).

Furthermore, the results showed a high level of implementation of service innovation construct, as its mean was 3.89 with a standard deviation of .633 (table 25), it might be explained partially by the conclusion that new small firms are frequently entering markets with new ideas, activities, processes, products and services (De Jong and Marsili, 2006) as well as Jordanian small and medium size companies in the IT sector are now maximizing their expenditures on IT services (www.jordaninvestment.com).

The researcher proposed that the surrounding affects positively and reinforces Information and Communication Technology companies to maximize the level of implementation of market orientation and service innovation, as ICT sector has a direct support from the government, in addition to supportive structures which are mainly intaj, Ministry of Information and Communication Technology and Telecommunications Regulatory Commission. More specifically, Jordan was the first country in the Arab world to has a fully liberalized telecommunication market, as well as Jordan modernized 75% of ICT related laws to be a market oriented regulations, enhancing the business environment for local and international investors, as well as Jordan has led the area by instituting the first independent telecommunications

regulatory body to find a competitive, fair, peace, attractive and pure business environment, also Jordan has a higher percentage of university graduates in IT specializations (www.jordaninvestment.com).

5.2. 2. The Effect of Market Orientation on Service Innovation.

The results showed the presence of a statistical significant positive relationship between applying market orientation concept and service innovation R= .860 (table 26), this result is in line with the findings of Atuahene- Gima,1996; Gatignon and Xuereb, 1997; Lukas and Ferrell, 2000 who supported the positive relationship between market orientation and innovation. To be more specific it is consistent with Kandampully and Duddy (1999) who suggested that market oriented firms have the capabilities to anticipate new preference or Lukas and Ferrell (2000) are aware of competitors activities before the others, also can imitate their recent innovation or develop new service offerings if imitating competitors becomes clear and easy to do, as well as Jaworski and Kohli (1996) suggested in their recent studies that it is unacceptable to deem that innovation is absent in the model of market orientation (This study is consistent with what have been demonstrated in the previous relevant studies, according to: (Hurley and Hult, 1998; Panesar and Markeset, 2008; Kuusisto and Meyer,2003; Gronroos, 2000; Kandampully, 2002, Ordanini and Maglio, 2009; Atuahene-Gima, 1996; Junarsin, 2010).

This study concluded that competitor orientation has the highest degree of impact on service innovation (Beta= .555) (table 28) since the existence or commination of current or potential competitors works as a motivator to find innovative service offerings (Dickson, 1992), followed by customer orientation (Beta= .433) (table 28) marketing researchers have concentrated their efforts upon two orientations which are customer orientation and competitor orientation (Gatignon and Xuereb, 1997; Menguc and Auh,

2005; Narver and Slater, 1990). Inter-functional coordination has a beta of .353 (table 28). On the other hand, intelligence responsiveness (Beta= .097), intelligence generation (Beta= .165) and then intelligence dissemination (Beta= .311) have the lowest beta values (table 28).

Multiple regression analysis indicated that there is a statistically significant effect of customer orientation on service innovation, the same result obtained after testing the second sub- null hypothesis which means that there is a statistical significant effect of competitor orientation on service innovation, that result was harmonic with Han et al.(1998) notion that combining customer orientation and competitor orientation will reinforce and motivate organizations overall innovativeness, also it is consistent with Grawe et al.(2009) finding which assured the positive relationship between customer orientation and competitor orientation with service innovation capability.

This study concluded that employees within marketing and sales departments of the selected companies appreciate the significance of inter-functional coordination and its crucial influence upon service innovation. While both customer orientation and competitor orientation are external, inter-functional coordination is internal, it is concerned about utilizing the resources which were generated by several means and that thing requires a cooperative business environment in which every one is responsible a bout the whole business, in addition to having an efficient firm (like efficient market in finance) where all information is available to all concerned parties without ignoring the importance of organizational structure since its design affects upon the communication process.

The surprising result is that there is no statistical significant effect of intelligence generation on service innovation, that contradiction with what has been expected might be attributed to the quality of collected data, organizations might be sticking to collect

huge amounts of data, so that they are focusing on the quantity of data that they collect rather than the quality of it. Knowledge and information which they need to provide an innovative service offering must be obtainable to help in understanding and responding effectively to the external environment and market demands. Only some sorts of information enable the decision makers to specify the gaps in service offerings in order to exploit new opportunities, as Grawe et al. (2009) concluded that lack of marketplace intelligence may hinder the creation of service innovation capabilities and the researcher assumed that the intended shortage of marketplace intelligence pertain to information quality rather than information quantity. In addition to that, many researchers (Zirger and Hartley, 1996; Moorman, 1995; Barczak and Sultan, 2001; Park et al. 2009; Blazevic et al. 2003) concluded that a huge a mount of collected information may affect negatively on innovation speed.

According to the prior inferential statistics, there is a statistical significant effect of intelligence dissemination on service innovation, since intelligence dissemination activities expand the extent to which firms employees participate understanding and believing of their marketing strategy design and implementation (Sinkula, 1994) which in turn enhance their capabilities to present innovative service offerings.

The final sub-null hypothesis is rejected which means that there is a statistical significant effect of intelligence responsiveness on service innovation which is consistent with Moorman (1995) notion is that there is a positive relationship between information exploitation (intelligence responsiveness) and effective decision making processes and implementation which result in higher level of new product performance.

The following Figure (5.1) illustrates the modified research theoretical framework according to the independent variables beta values. Each independent variable within market orientation construct is listed in a descending order to reflect its significance in implementing service innovation.

In addition to R square value, which reflects a strong positive relationship between market orientation and service innovation.

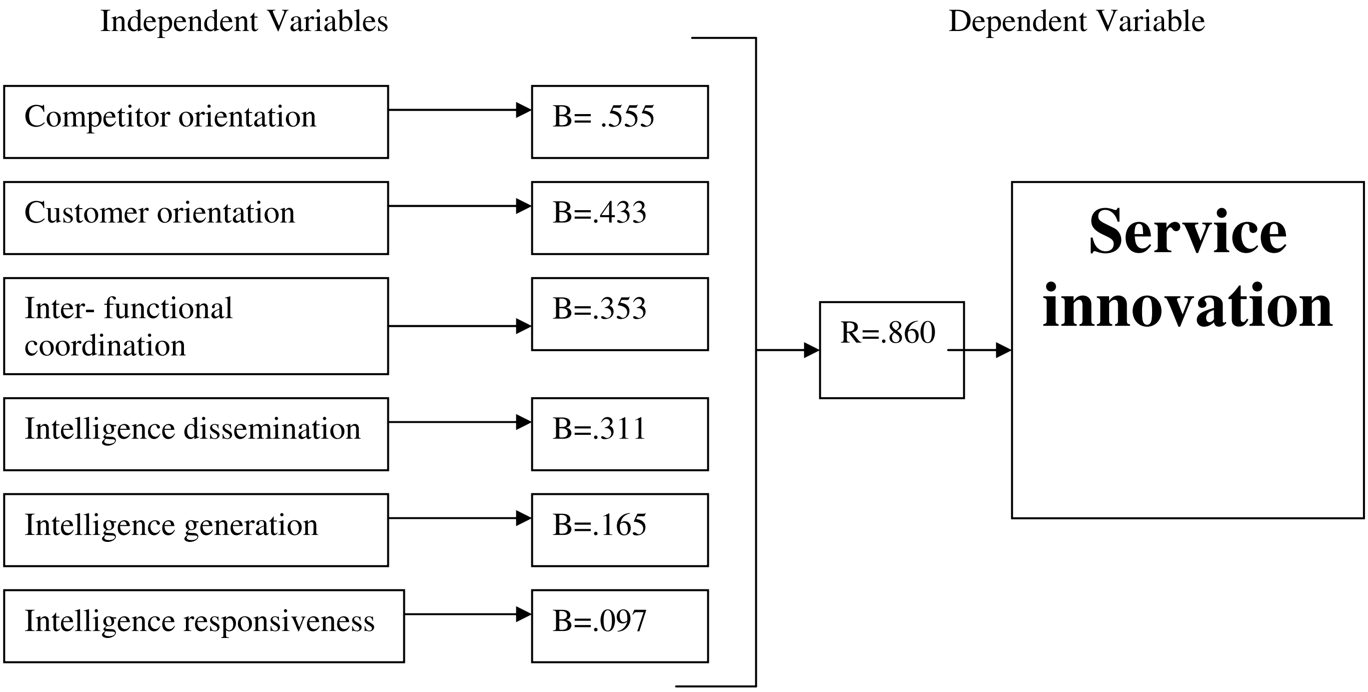


Figure (5.1) Modified Research Theoretical Framework

5.3. Recommendations and Implications

1- The correlation between market orientation and service innovation was reasonably high and positive R= .860 (table 26). From a managerial perspective, it suggests that organizations should adopt market orientation constructs to increase the levels of service innovation.

2- Among the six components of market orientation, competitor orientation has the greatest effect on service innovation (table 28). So that, Jordanian ICT companies must be careful about the actions and activities of their current competitors without neglecting the threat of potential competitors and that process (tracking competitors) must be frequent, periodic, effective, efficient and on timely basis through marketing intelligence and many other formal – informal tools.

3- Jordanian ICT companies should direct more of their capabilities toward benefiting their customers as much as possible, in addition to broaden the area of customer participation to express their needs and wants through several techniques such as: focus groups, efficient websites, activate customer service techniques, in depth interviews, having managerial styles which enhance and facilitate customers contact with decision makers, responding effectively to customers complaint, improving after sales services, maintain long term relationships with customers, encouraging customer to state his- her opinions, suggestions or ideas and many other techniques.

4- It might be helpful to modify the organizational structure of Jordanian ICT companies in order to facilitate inter-functional coordination activities (by enhancing the type and speed of communication), in addition to institute organized databases to perform this task smoothly, in which relevant information is accessible to related parties.

5- Jordanian ICT companies must be careful about the quality of information that they collect and appreciate its value before intelligence dissemination, since developing innovative service offerings requires unique sets of information.

6- This study concluded that intelligence dissemination affects service innovation. Therefore, the selected company's cultures have to maximize the importance of communication between all functional departments, and then translate that culture into behaviors through periodic interdepartmental meetings. In addition to, instituting comfortable systems or databases in which information exchange processes are clear and simple to accomplish that objective successfully.

7- This study revealed that intelligence responsiveness affects service innovation and that requires a deliberate response system on timely basis, several tools could be used to attain that objective such as hot communication lines to handle customers inquiries and transfer their requirements or complaints, tracking customers preferences frequently using e-mails, telephones, observations and many other tools of marketing intelligence, then modifying service offerings or create new service offerings which may solve customers problems, since customers expect firms to delight them with innovative service offerings, as well as handling customers complaints effectively.

8- Additional research is needed to enhance the validity and reliability of service innovation scale items and their ability to achieve the research objectives.

9- Applying the research model within other sectors (different research settings) to investigate the differences and their implications, in addition to evaluate and reinforce the generalizability of the results.

10- Including moderating variables such as organizations size, organizations age, organizational structure, competitive enviroment or employee satisfaction to investigate their influence upon service innovation.

11- There are several market orientation models with multiple components, consequently, future research can add or exclude other components of market orientation to test their impact on service innovation based on the research setting.

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ogySector/tabid/89/language/ar-JO/Default.aspx (accessed on March 10, 2011)

Appendix

List of Research Population

Table (7) Intaj Members Directory

No.	Company Name
1	01 Tracks
2	16th Street Ventures
3	Abdali Communications company
4	Accelerator Technology Holdings
5	Access to Arabia
6	Adaptive Technology
7	Al Failq for Information Technology
8	Al Nasher Technical Services
9	Anchor for Project Management Consultancy- APMC
10	Applexya -7th Dimension for Application Development
11	Aqar – Estate .com
12	Arab Advisors Group
13	Arab Web Directory
14	Arab Academy for Microsoft Technologies
15	Arabia cell
16	Arabian Office Automation Company
17	Arabic Pearl Internet Portal
18	Artelco
19	Aspire Services
20	At Your service
21	Beecell-Al- Mutatwera for Mobile Applica
22	Beladcom
23	Believe Soft
24	Blink Communication
25	Blue Energy for Advanced Technologies BEAT
26	Blue Net Marketing and Communication Services
27	Business Application of Computational Intelligence
28	Business Plus Plus
29	Central E-commerce Co. ltd- Jormall.com
30	Cisco Systems International
31	Code Name Pro
32	compuBase
33	Computer & Communication Systems
34	Computer Networking Services
35	Convergence Consulting & Technology
36	Creative Think
37	CRM Jo
38	Crystelcall
39	Cubic Art Technologies
40	Dakession consulting
41	Dama Max
42	Data Consult
43	Dot.Jo

44	E – tech Systems
45	Eastern Networks
46	Echo Technology
47	EDATA Technology and Consulting
48	Electronic Health Solutions
49	Electronic Source Solutions
50	Elite Information and Systems
51	Ericsson
52	Esense
53	ESKADENIA Software
54	Estarta Solutions
55	Extensya
56	FACT
57	Focus Solutions
58	Fourth Dimension systems
59	Gate2play
60	General Computers & Electronics
61	Global Technology
62	Globe Kinetic
63	Globitel
64	Google
65	Huawei
66	IBSPoint
67	Ideation Box
68	Imagine Technologies
69	In4ma Software
70	Info2cell
71	Infograph
72	Information Technology Planet- ITP
73	Integrated Business Information Solutions
74	Integrated Standard Solutions
75	Integrated Technology Group
76	Intel Corporation
77	Cyberia
78	International Turnkey Systems
79	Internet Business Solutions
80	Intracom Jordan
81	Iris Guard
82	IT Training and Solutions
83	Jabba Internet Group
84	Jadeer Training
85	Javna Wireless Software Solutions
86	Jeeran for Software Development
87	Jordan Business Systems (JBS)
88	Jordan Data Systems
89	Jordan Scientific Company
90	JOSAFE
91	Ketab Technologies

92	Keysoft
93	Kharabeesh
94	Kinz for Information Technology
95	Kulacom
96	Life- long Medical
97	Logicom Jordan L.L.C
98	Luminus Group
99	Mada Communication
100	Manaf Soft
101	MAYSALWARD(MRD)
102	Mediascope
103	Menai Tech
104	Microsoft
105	Mirsal
106	Mixed Dimensions
107	Mobile Interactive Technologies
108	Modern Scientific & Electronic Co
109	Motorola Jordan
110	M starta
111	National Health Insurance Administration Co.
112	National Net Ventures (N2V)
113	NCR Corporation
114	Newtek Solutions
115	Offtec Group
116	Omniyat for IT and Business Management
117	Optimiza Group
118	Oracle systems Ltd.
119	Orange
120	Oriented Solutions
121	Otrain
122	Outsource
123	Parallel Perspective Management Consulting Company
124	Pioneers Information Technologies
125	Practech
126	Principle Advanced Communication Technology
127	Pro Technology
128	Progress Soft Corporation
129	Prosys Software
130	Quality Business Solutions
131	Quirkat
132	Reach 2.0
133	Reach Group
134	Realsoft
135	Right Pixels
136	Rubicon Holding
137	Rubikomm Telecom Solutions
138	Savvyteck
139	Semantic Intelligent Technologies

140	Sermon Business Solutions
141	Shnoudi Trading Co. (STC)
142	Shoofee TV
143	Sigma Soft Inc.
144	Signal Communications
145	Smart Cube Information Technology
146	Specialized Data Base Technologies
147	Specialized Technical Services
148	Spring Field
149	Spring Web Technologies
150	SSS process
151	Stella Design
152	Strategic Center for Organizational Performance Improvement
153	Synaptic Technologies
154	Systems & Electronic Development
155	T Consulting Group
156	TakTek Games
157	TDM Group
158	TE Data Jordan
159	Techlogix
160	Technology Labs for Software Development
161	Technosys
162	Telecom enterprise
163	Telefinity
164	The Online Project – Modern Media
165	Trans Jordan for Information Technology & Development
166	Umniah Mobile Company
167	Unicom Technology Services
168	Union Holdings
169	United Technology Software
170	Viacloud Jordan
171	Virtecha Solutions
172	VTEL Holdings Company
173	What is Next? For Business Solutions
174	Wheels Express
175	Wizards productions
176	World Software Co.
177	Wunderman Digital
178	y- Consult
179	Yahoo Arabia
180	Younivate
181	Zain
182	Zain Group
183	Zaki ALGhul
184	Zurich for Software Development – Servit

Source: www. Intaj.net

List of Research Sample

Table (8) Research Sample

NO.	Company Name	Establishment date
1	Access to Arabia	1997
2	Arab Advisors Group	2001
3	Arab Web Directory	2006
4	Artelco	1983
5	Cisco Systems International (in Jordan)	2005
6	Computer Networking Services	1996
7	E – tech Systems	2000
8	Eastern Networks	1984
9	Echo Technology	2007
10	EDATA Technology and Consulting	2005
11	Electronic Source Solutions	2010
12	Elite Information and Systems	2005
13	Esense	2001
14	Estarta Solutions	1993
15	Focus Solutions	2004
16	Fourth Dimension systems (in Jordan)	2005
17	General Computers & Electronics	1985
18	Globitel	1996
19	IBSPoint	2010
20	Imagine Technologies	2001
21	Info2cell	1998
22	Information Technology Planet- ITP	2001
23	Integrated Standard Solutions	2001
24	Integrated Technology Group	1989
25	Cyberia	1999
26	Internet Business Solutions	2000
27	Javna Wireless Software Solutions	2001
28	Jeeran for Software Development	2005
29	Jordan Business Systems (JBS)	2005

30	Jordan Data Systems	1981
31	Ketab Technologies	2007
32	Kinz for Information Technology	2009
33	Manaf Soft	1986
34	Menai Tech	2003
35	Mobile Interactive Technologies	2002
36	Oracle systems Ltd.	2005
37	Orange	2005
38	Pioneers Information Technologies	2003
39	Principle Advanced Communication Technology	2007
40	Pro Technology	2004
41	Prosys Software	2005
42	Savvyteck	2003
43	Signal Communications	2002
44	Specialized Technical Services	1980
45	Telefinity	2005
46	Umniah Mobile Company	2005
47	Viacloud Jordan	2005
48	Wheels Express	2009
49	Yahoo Arabia	1998
50	Zain	1995

Source: www.Intaj.net

University of Jordan
Faculty of graduate studies
Marketing department

Dear employee,

This research is about investigating the effect of market orientation on service innovation within Information and Communication Technology (ICT) sector in Jordan. This research is part of the requirements to fulfill the MBA/Marketing program at University of Jordan.

You are kindly requested to read and answer this questionnaire while knowing that all information well be treated as highly confidential and will be used only for the purpose of this study. A copy of the research will be provided upon your request.

Your precious time is highly appreciated; many thanks in advance for your kind effort and cooperation.

Student: Eatedal Basheer

Personal primary information

Please choose the right choice which accurately represents your current position:

1. Gender:

( ) Male.
( ) Female.

2. Age:

( ) 18- 24
( ) 25- 29
( ) 30- 34
( ) 35- 39
( ) 40- 44
( ) more than 44 years.

3. Educational Level:

( ) secondary school
( ) Diploma (2years)
( ) Bachelor
( ) Master
( ) Doctoral

4. Experience Level (in the current job):

( ) less than 5 years
( ) 5- 9
( ) 10- 14
( ) 15- 19
( ) 20- 24
( ) more than 24 years

5. Company age:

( ) less than 5 years
( ) 5- 9
( ) 10- 14
( ) 15- 19
( ) 20- 24
( ) more than 24 years

6. Company size: (Number of employees)

( ) less than 25
( ) 25- 50
( ) 51- 75
( ) 76- 100
( ) 101- 125
( ) more than 125

Please put (X) sign on the statement which reflects your current attitude in the company about the level of market orientation and its effect on service innovation:

	Statement	Does not apply	Applies to a small extent	Applies to a medium extent	Applies to a large extent	Applies totally
Customer orientation						
1	We constantly monitor our level of commitment and orientation to serving customers needs.	1	2	3	4	5
2	Our business objectives are driven primarily by customer satisfaction.	1	2	3	4	5
3	Our strategy for competitive advantage is based on our understanding of customer needs.	1	2	3	4	5
4	Our business strategies are driven by our beliefs about how we can create greater value for customers.	1	2	3	4	5
5	Measuring customer satisfaction is a systematic and frequent function.	1	2	3	4	5
6	Our company gives close attention to after sales services.	1	2	3	4	5
Competitor orientation						
		Does not apply	**Applies to a small extent**	**Applies to a medium extent**	**Applies to a large extent**	**Applies totally**
7.	Our salespeople regularly collect information concerning competitors' activities (either current or potential competitors).	1	2	3	4	5
8.	Company's top management regularly discusses competitors' actions.	1	2	3	4	5
9.	We frequently track the general performance of key competitors.	1	2	3	4	5
10.	We frequently evaluate the strengths of key competitors.	1	2	3	4	5
11.	We regularly attempt to identify competitors' strategies using many tools.	1	2	3	4	5

Inter functional coordination						
		Does not apply	**Applies to a small extent**	**Applies to a medium extent**	**Applies to a large extent**	**Applies totally**
12.	All of our business functions (e.g., marketing, sales, manufacturing, research and development, etc) are integrated in serving the needs for our target markets.	**1**	**2**	**3**	**4**	**5**
13.	All of our business functions and departments are responsive to each others needs and requests.	**1**	**2**	**3**	**4**	**5**
14.	Managers from each department regularly visit our current and prospective customers.	**1**	**2**	**3**	**4**	**5**
15.	We frequently communicate information about our successful and unsuccessful customer experiences across all business functions.	**1**	**2**	**3**	**4**	**5**
16.	Our managers understand how every one in our business can contribute to create customer value.	**1**	**2**	**3**	**4**	**5**
Intelligence generation						
		Does not apply	**Applies to a small extent**	**Applies to a medium extent**	**Applies to a large extent**	**Applies totally**
17.	We meet with customers at least once a year to find out what products or services they will need in the future.	**1**	**2**	**3**	**4**	**5**
18.	Individuals from our manufacturing department interact directly with customers to learn how to serve them better. We work actively to detect changes in our customers' product preferences.	**1**	**2**	**3**	**4**	**5**
20.	We collect industry information through informal means (e.g., personal letters, meetings and interviews).	**1**	**2**	**3**	**4**	**5**

21.	Intelligence on our competitors is generated collectively by several departments.	**1**	**2**	**3**	**4**	**5**
22.	We work regularly to detect fundamental shifts in our industry (e.g., competition, technology, regulation).	**1**	**2**	**3**	**4**	**5**
23.	We periodically review likely effect of changes in our business environment on customers.	**1**	**2**	**3**	**4**	**5**
Intelligence dissemination						
		Does not apply	**Applies to a small extent**	**Applies to a medium extent**	**Applies to a large extent**	**Applies totally**
24.	We have interdepartmental meeting at least once a quarter to discuss market trends and developments.	**1**	**2**	**3**	**4**	**5**
25.	Marketing personnel in our business unit spend time discussing customers future needs with others functional departments.	**1**	**2**	**3**	**4**	**5**
26.	When something important happens to major customer or market, the whole business unit knows about it in a short period.	**1**	**2**	**3**	**4**	**5**
27.	Data on customer satisfaction are disseminated at all levels in this business unit on regular bases.	**1**	**2**	**3**	**4**	**5**
28.	Our company's culture maximizes the importance of communication between marketing and manufacturing departments concerning market developments.	**1**	**2**	**3**	**4**	**5**
29.	When one department finds out something important about competitors, it is fast to alert other departments.	**1**	**2**	**3**	**4**	**5**
Responsiveness: **A -Response design**						

30.	For one reason or another we tend to be careful about changes in our customers' product or service needs.	**1**	**2**	**3**	**4**	**5**
31.	We periodically review our product development efforts to ensure that they are in line with what customers want.	**1**	**2**	**3**	**4**	**5**
32.	Our business plans are driven more by market research than by technological advances.	**1**	**2**	**3**	**4**	**5**
33.	Several departments get together periodically to plan a response to changes taking place in our business environment.	**1**	**2**	**3**	**4**	**5**
34.	The product lines we sell depend more on real market needs than internal politics.	**1**	**2**	**3**	**4**	**5**
B – Response implementation						
35.	If a major competitor intends to launch an intensive campaign targeted our customers, we will implement a response immediately.	**1**	**2**	**3**	**4**	**5**
36.	The activities of different departments in this business are well coordinated.	**1**	**2**	**3**	**4**	**5**
37.	Responding effectively to customers complaints is considered a necessary requirement for business success.	**1**	**2**	**3**	**4**	**5**
38.	When we came up with a great marketing plan, we are able to implement it in a timely fashion.	**1**	**2**	**3**	**4**	**5**
39.	When we find out that our customers are unhappy with the quality of our service, we take corrective action immediately.	**1**	**2**	**3**	**4**	**5**
40.	When we find that customers would like us to modify a product or service, the departments involved make concerted efforts to do so.	**1**	**2**	**3**	**4**	**5**

Service innovation						
		Does not apply	**Applies to a small extent**	**Applies to a medium extent**	**Applies to a large extent**	**Applies totally**
41.	Innovation is readily accepted in program / project management.	**1**	**2**	**3**	**4**	**5**
42.	Our company's top management gives special emphasis to service innovation.	**1**	**2**	**3**	**4**	**5**
43.	Our company constantly seeks new ways to better service our customers.	**1**	**2**	**3**	**4**	**5**
44.	Our company is able to change (modify) our current service approaches to meet special requirements from customers.	**1**	**2**	**3**	**4**	**5**
45.	Compared to our competitors, our company is come up with new service offerings.	**1**	**2**	**3**	**4**	**5**

الجامعة الأردنية
كلية الدراسات العليا
قسم التسويق

عزيزي الموظف/ عزيزتي الموظفة:

تهدف هذه الدراسة لتقصّي مدى التّوجه السّوقي وأثره على الإبداع الخدماتي ضمن قطاع تكنولوجيا المعلومات والاتصالات في الأردن. كما يعدّ هذا البحث جزءا من المتطلبات الأساسية لاستكمال برنامج الماجستير (قسم التسويق) في الجامعة الأردنية .

أرجو من حضرتكم التكرم بتعبئة كامل بنود الاستبيان بدقة وبموضوعية، علما بأنّ هذه البيانات ستعامل بسريّة تامّة وهي مخصصة لغايات البحث العلمي فقط. كما ويمكننا تزويدكم بنسخة من هذه الدّراسة حال إتمامها.

شاكرين لكم حسن تعاونكم

الباحثة: اعتدال بشير

البيانات الشخصية :

***الجنس:**
( ) ذكر ( ) أنثى
***العمر :**
( )18-24 سنة
( ) 25-29
( ) 30-34
( ) 35-39
( ) 40-44
( ) أكثر من 44 سنة
***المستوى التعليمي:**
( ) ثانوية عامة
( ) دبلوم
( ) بكالوريس
( ) ماجستير
( ) دكتوراه
***سنوات الخبرة في الوظيفة الحالية:**
( ) أقل من 5 سنوات
( ) 5-9
( ) 10-14
( ) 15-19
( ) 20-24
( ) أكثر من 24 سنة
***عمر الشركة:**
( ) أقل من 5 سنوات
( ) 5- 9
( ) 10- 14
( ) 15- 19
( ) 20- 24
( ) أكثر من 24 سنة
***حجم الشركة : (مقاسا بعدد موظفيها)**
( ) أقل من 25موظف
( ) 25- 50
( ) 51- 75
( ) 76- 100
( ) 101- 125
( ) أكثر من 125 موظف

الرجاء وضع إشارة (×) مقابل الخيار الذي يعكس موقفك الحالي في الشركة تجاه مدى التوجه السوقي وأثره على الإبداع الخدماتي :

	غير مطبق	مطبق بدرجة قليلة	مطبق بدرجة متوسطة	مطبق بدرجة كبيرة	مطبق كليا
التوجه نحو العميل :					
1- تقوم الشركة باستمرار برصد مستوى كل من الالتزام والتوجه نحو خدمة حاجات العملاء.	**1**	**2**	**3**	**4**	**5**
2- يعدّ رضا العملاء المحرك الأساسي لأهداف الشركة .	**1**	**2**	**3**	**4**	**5**
3- تبنى إستراتيجية الميزة التنافسية للشركة على أساس فهم حاجات العملاء.	**1**	**2**	**3**	**4**	**5**
4- الأهداف المتعلقة بتحقيق القيمة المضافة للعميل هي الأساس في صياغة استراتيجيات العمل .	**1**	**2**	**3**	**4**	**5**
5- يتم قياس رضا العملاء بصورة متكررة ومنتظمة.	**1**	**2**	**3**	**4**	**5**
6- تولي الشركة اهتماما كبيرا لخدمات ما بعد البيع	**1**	**2**	**3**	**4**	**5**
التوجه نحو المنافس :					
7- يقوم رجال البيع بجمع المعلومات الخاصة بنشاطات المنافسين (الحاليين والمحتملين) بصورة منتظمة .	**1**	**2**	**3**	**4**	**5**
8- تقوم الإدارة العليا للشركة بمناقشة نشاطات المنافسين بصورة منتظمة .	**1**	**2**	**3**	**4**	**5**
9- تتم متابعة الأداء العام للمنافسين الرئيسيين بشكل دوري .	**1**	**2**	**3**	**4**	**5**
10- تقيّم الشركة نقاط القوة للمنافسين الرئيسيين بصورة منتظمة .	**1**	**2**	**3**	**4**	**5**
11- تحاول الشركة بانتظام تقصي استراتيجيات المنافسين لها من خلال عدة وسائل.	**1**	**2**	**3**	**4**	**5**
التنسيق الوظيفي الداخلي :					
12- تتكامل وظائف الشركة(التسويق، المبيعات، التصنيع، البحث والتطوير، الخ) لخدمة حاجات العملاء في أسواقها المستهدفة .	**1**	**2**	**3**	**4**	**5**
13- يتم التنسيق بين مختلف الأقسام الداخلية للشركة لتلبية احتياجاتهم ومتطلباتهم اللازمة لإتمام العمل.	**1**	**2**	**3**	**4**	**5**
14- يقوم مدراء الشركة في مختلف أقسامها بزيارة العملاء الحاليين والمتوقعين بشكل منتظم .	**1**	**2**	**3**	**4**	**5**
15- يتم تبادل الخبرات الناجحة وغير الناجحة حول التعامل مع العميل بين مختلف أقسام الشركة بصورة مستمرة ومنتظمة.	**1**	**2**	**3**	**4**	**5**
16- يتيح المدراء لكل عضو في الشركة فرصة	**1**	**2**	**3**	**4**	**5**

المساهمة في رفع مستوى خدمة العملاء.					
جمع المعلومات :					
17- تتم مقابلة العملاء مرة واحدة سنويا على الأقل لتحديد السلع والخدمات التي يحتاجونها في المستقبل	**1**	**2**	**3**	**4**	**5**
18- يلتقي موظفو قسم التصنيع مباشرة مع العملاء للتوصل إلى أفضل مستوى من الخدمات .	**1**	**2**	**3**	**4**	**5**
19- يعمل قسم التسويق بنشاط لتحري التغيرات المتعلقة بتفضيلات العملاء للخدمات المطروحة	**1**	**2**	**3**	**4**	**5**
20- يتم اللجوء إلى وسائل غير رسمية في جمع المعلومات الخاصة بالقطاع (تكنولوجيا المعلومات والاتصالات) كالرسائل الشخصية واللقاءات والمقابلات .	**1**	**2**	**3**	**4**	**5**
21- تعمل مختلف أقسام الشركة بصورة جماعية لجمع المعلومات الخاصة بالمنافسين .	**1**	**2**	**3**	**4**	**5**
22- تقوم الشركة بمتابعة التغيرات الهامة الحاصلة في قطاع تكنولوجيا المعلومات والاتصالات (المنافسة، التكنولوجيا ، التشريعات والقوانين وغيرها) بصورة منتظمة.	**1**	**2**	**3**	**4**	**5**
23- تتم مراجعة التأثيرات المحتملة للتغيرات الحاصلة في قطاع تكنولوجيا المعلومات والاتصالات على العملاء بصورة دورية .	**1**	**2**	**3**	**4**	**5**
نشر المعلومات :					
24- تلتقي مختلف أقسام الشركة مرة واحدة فصليا على الأقل لمناقشة اتجاهات السوق وتطوراته .	**1**	**2**	**3**	**4**	**5**
25- يجتمع موظفو قسم التسويق مع الأقسام الأخرى لمناقشة احتياجات العملاء المستقبلية .	**1**	**2**	**3**	**4**	**5**
26- بمجرد وقوع أيّ حدث مهمّ متعلق بأي عميل أو سوق رئيسي فإنه يتم إبلاغ القسم المعني بفترة زمنية وجيزة .	**1**	**2**	**3**	**4**	**5**
27- يتم نشر المعلومات الخاصة برضا العملاء لكافة العاملين في الأقسام المعنية بصورة منتظمة .	**1**	**2**	**3**	**4**	**5**
28- تركز ثقافة الشركة على أهمية الاتصال بين قسمي التسويق والتصنيع لدراسة و مناقشة تطورات السوق .	**1**	**2**	**3**	**4**	**5**
29- في حال التوصل إلى أمر هام يتعلق بالمنافسين فإنه يتم الإبلاغ عنه لكافة أقسام الشركة المعنية بسرعة .	**1**	**2**	**3**	**4**	**5**
الرد على المعلومات (الاستجابة) : **تصميم الردّ على المعلومات :**					
30- تحرص الشركة على متابعة التغيرات الخاصة باحتياجات العملاء للخدمات المقدمة إليهم .	**1**	**2**	**3**	**4**	**5**
31- تقوم الشركة بمراجعة الجهود المتعلقة بتطوير	**1**	**2**	**3**	**4**	**5**

المنتجات الجديدة للتأكد من مدى انسجامها مع ما يتطلبه العملاء .					
32- تعتمد صياغة خطط الشركة على بحوث السوق أكثر من اعتمادها على التطورات التكنولوجية .	**1**	**2**	**3**	**4**	**5**
33- تلتقي مختلف أقسام الشركة بصورة دورية لصياغة ردود الفعل المناسبة على التغيرات الحاصلة في بيئة العمل (قطاع تكنولوجيا المعلومات والاتصالات) .	**1**	**2**	**3**	**4**	**5**
34- يعتمد تصميم المنتجات التي تقدمها الشركة على حاجات السوق الفعلية أكثر من السياسات الداخلية للشركة .	**1**	**2**	**3**	**4**	**5**
تطبيق الرد على المعلومات :					
35- تستجيب الشركة بصورة فورية في حال إطلاق إحدى الشركات المنافسة لحملة تسويقية مكثفة تستهدف عملائها .	**1**	**2**	**3**	**4**	**5**
36- تتسم نشاطات مختلف أقسام الشركة بالتنسيق الفعال .	**1**	**2**	**3**	**4**	**5**
37- يعدّ ردّ الشركة على شكاوى العملاء بفعالية إحدى المتطلبات الأساسية لنجاح العمل	**1**	**2**	**3**	**4**	**5**
38- تمتلك الشركة القدرة على تطبيق الخطط التسويقية الفعالة بالوقت المناسب .	**1**	**2**	**3**	**4**	**5**
39- تتخذ الشركة الإجراءات التصحيحية المناسبة بشكل فوري في حال استياء العملاء من مستوى جودة الخدمة المقدمة .	**1**	**2**	**3**	**4**	**5**
40- تستجيب الأقسام المعنية داخل الشركة لرغبات العملاء في تعديل مواصفات الخدمات المقدمة إليهم	**1**	**2**	**3**	**4**	**5**
الإبداع الخدماتي :					
41- يعدّ الإبداع إحدى القيم الجوهرية في ثقافة الشركة .	**1**	**2**	**3**	**4**	**5**
42- تولي الإدارة العليا للشركة اهتماما بالغا للإبداع الخدماتي .	**1**	**2**	**3**	**4**	**5**
43- تسعى الشركة بصورة دائمة لإيجاد طرق جديدة تمكنها من خدمة عملائها بصورة أفضل	**1**	**2**	**3**	**4**	**5**
44- تمتلك الشركة القدرة لتعديل الخدمات الحالية بما ينسجم مع متطلبات العملاء المستجدة .	**1**	**2**	**3**	**4**	**5**
45- بالمقارنة مع منافسي الشركة ، فإننا نزود عملائنا بأحدث عروض الخدمات .	**1**	**2**	**3**	**4**	**5**

دراسة على شركات تكنولوجيا المعلومات والاتصالات في الأردن

إعداد

اعتدال بشير "أحمد أمين"

المشرف

الأستاذ الدكتور هاني حامد الضمور

ملخص

هدفت هذه الدراسة إلى معرفة مدى تأثير التوجه السوقي على الإبداع الخدماتي في قطاع تكنولوجيا المعلومات والاتصالات الأردني. ركز هذا البحث على عناصر التوجه السوقي الستة التالية: التوجه نحو العميل، التوجه نحو المنافس، التنسيق الوظيفي الداخلي، جمع المعلومات، نشر المعلومات، والاستجابة. وقد تم الاعتماد على تحليل الانحدار المتعدد كأسلوب تحليل إحصائي لتحقيق هدف الدراسة.

كان مجتمع الدراسة المستهدف هو جميع أعضاء هيئة تكنولوجيا المعلومات والاتصالات الأردنية المعنيين بتزويد خدمات تكنولوجيا المعلومات والاتصالات والبالغ عددهم 184 شركة لغاية شهر شباط من عام 2011، وقد تم تطبيق الدراسة على 50 شركة من مجتمع الدراسة الآنف ذكره وتمثلت وحدة التحليل بموظفي أقسام التسويق والمبيعات في الشركات المدروسة، كما تم الاعتماد على الاستبيان كوسيلة أساسية لجمع البيانات الأولية فقد تم توزيع 300 استبيان ضمن الشركات المحددة في الدراسة.

توصلت هذه الدراسة إلى أن هناك مستوى عال من التطبيق لمفهوم التوجه السوقي ضمن الشركات المدروسة، كما أن التوجه السوقي له تأثير ذو دلالة إحصائية على الإبداع الخدماتي. كما أوضحت الدراسة أن عنصر التوجه نحو المنافس يليه عنصر التوجه نحو العميل كان له الأثر الإحصائي الأكبر على الإبداع الخدماتي، بينما جمع المعلومات هو العنصر الوحيد الذي لم يكن له تأثير ذو دلالة إحصائية على الإبداع الخدماتي.

وفي النهاية قدمت الدراسة جملة من التوصيات لأجل تعزيز الإبداع الخدماتي في قطاع تكنولوجيا المعلومات والاتصالات الأردني من أهمها: ضرورة اهتمام ومتابعة شركات تكنولوجيا المعلومات والاتصالات الأردنية لنشاطات المنافسين الحاليين والمحتملين بصورة مستمرة، توجيه كامل الإمكانيات المتاحة لخدمة العميل وزيادة مشاركته في عمليات التصنيع والإنتاج، تعديل الهياكل التنظيمية لتسهيل نشاطات التنسيق الوظيفي الداخلي بالإضافة إلى إنشاء قواعد بيانات منظمة لتحقيق هذه الغاية، الاهتمام بنوعية المعلومات التي يتم جمعها قبل نشرها وتحليلها، بالإضافة إلى تعظيم أهمية الاتصال بين مختلف الأقسام العاملة بالشركة جنبا إلى جنب مع تطوير نظام استجابة فعال.